Classified

RATES: Fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Electric Refrigeration News, 5229 Cass Ave., Detroit, Mich.

POSITIONS AVAILABLE

SALES ENGINEER WANTED. Prominent manufacturer of automatic control equipment has several openings for sales engineers. Previous University training or experience in air conditioning and heating, and an acquaintanceship with architects and engineers is essential. Box 774, Electric Refrigeration News.

REFRIGERATION ENGINEER. Must be capable of designing hermetic unit and putting it in production. State technical training and practical experience. Box 786, Electric Refrigeration News.

WANTED: A-1 research chemist or chemical engineer capable of handling all aspects of new refrigerant development and application to refrigeration machines. In your reply give full details as to technical education and practical or academic research experience, together with references. Box 787, Electric Refrigeration News.

POSITIONS WANTED

YOUNG MAN 26 years old, single, graduate of Coyne Electrical School in electricity, refrigeration and air conditioning, desires position as service man. Willing worker, good character, will locate anywhere. Box 785, Electric Refrigeration News.

COMMERCIAL ENGINEER on service and erection. High and low pressure. Single and free to travel. Box 788, Electric Refrigeration News.

CAPABLE, energetic, aggressive sales engineer seeks connection as manufacturer's representative or district manager. Extensive training and experience as executive, salesman, sales engineer and engineer. Widely acquainted with purchasing agents, engineers and principal executives. Very satisfactory record and references. Box 789, Electric Refrigeration News.

DISTRIBUTORS WANTED

MICHIGAN — OHIO — INDIANA for new automatic defroster for household and commercial refrigerators. A real money-maker. The only 100% automatic defroster on the market. No competition. Fully guaranteed. 20 to 35% savings in electric consumption. Over 100% profit. Unusual opportunity. Address all replies to R. P. Gilcher, 1013 Lafayette Bldg., Detroit, Mich.

BUSINESS OPPORTUNITY

COMMERCIAL REFRIGERATION, air conditioning, engineering and installation business for sale. Large inventory of parts and equipment. Located in New York City. Owner retiring from business. Box 784, Electric Refrigeration News.

EQUIPMENT FOR SALE

COMPRESSORS for 4 and 5 foot cabinets $7.00 each. Box 769.

REFRIGERATOR DEALERS! Make money with Federal's reconditioned refrigerators. 1000 refrigerators such as Frigidaire, G. E., Kelvinator, Electrolux, etc., completely remanufactured and rebuilt, some as is, as low as $15; also hundreds of new refrigerators priced for promotional purposes. Federal Refrigerator Corp., 57 East 25th St., New York.

NEW, single and twin cylinder methyl compressors, especially adaptable, domestic and small commercial installations; condensers, receiver valves, pulleys, fans; motors, 1/6 to 1/3 H.P.; fittings, expansion valves, Bristol recording instruments, etc. All new merchandise in original containers. Will make prices attractive for quick disposal. Box 775, Electric Refrigeration News.

BRAND NEW PARTS. Manufacturers' close outs—fully guaranteed one year. Detroit Lubricator thermostatic expansion valves, $3.95 (flange type). 50¢ extra for special fittings. Mullins 3 tray all porcelain evaporator complete with porcelain front and hangers, $6.95. Double row condensers, $1.39. Electric door light, 59¢. Hundreds of other specials as well as a complete line of standard, nationally advertised parts at drastic price reductions. Write us for your parts requirements. Federal Refrigerator Corp., 57 East 25th St., New York.

REPAIR SERVICE

GENERAL ELECTRIC SEALED UNITS—repaired, rebuilt, exchanged. Guaranteed service. Our modern shop is especially equipped to efficiently repair these units. prices low and workmanship the best. Give model number when writing. Immediate service. Rex Refrigeration Service, Inc., 446 East 79th St., Chicago.

MAJESTIC UNITS, any model, standard or hermetic, rebuilt or exchanged $17.50. Any household model G.E. rebuilt $22.50. All model Majestics in stock for prompt exchange. All prices F.O.B. Chicago and guarantee six months. Wholesale only. Refrigeration Products, Inc., 122 W. Illinois St., Chicago, Ill.

GENERAL ELECTRIC sealed units repaired, rebuilt. Guaranteed workmanship. The largest shop and best equipped in the United States. Give model number when writing. Immediate service. Satisfied customers in every part of the country. Refrigerator Engineering Parts and Service Co., 2800 So. Parkway, Chicago, Ill.

TIRED OF BEING FOOLED—we really fix your Majestic Units, make them freeze faster and run less than when they were new, $17.50 to $37.50, with a two-year written guarantee. Send your units to Ft. Smith and get them fixed right. Peno Service Company, Ft. Smith, Ark.

HALECTRIC control repair service. All makes thermostatic and pressure controls rebuilt. Automatic and thermostatic expansion valves repaired. Refrigerant gases carried in stock for rush shipment. Warrenoli for stuck-up compressors. Rebuilt American Radiator Mercoid controls similar to No. 848, five dollars each. Halectric Laboratory, 1793 Lakeview Rd., Cleveland, Ohio.

SERVICE

NOTICE DISTRIBUTORS: Weaver R. Wells, refrigeration installation and service engineer is equipped to properly install and service your equipment in this territory. Please write or phone him for future engagements. 1312 Willow St., Trinidad, Colo. Phone 110.

SCHOOLS

UNIVERSAL PRACTICAL TRAINING, commercial, domestic, qualifies men for jobs in fast growing refrigeration and air conditioning. Practical training and hundreds of refrigerators, all makes. Also, expansion valves, controls, motor repairs. All latest type equipment. No experience needed. Learn by doing. Universal Refrigeration Engineering School, 352 4th Ave., New York City.

DISPLAYS

ARTIFICIAL FOOD DISPLAYS at prices you can afford to pay. A realistic food set of meats, fruits and vegetables for every make refrigerator. Complete sets from $3.00 to $6.00. Write your source of refrigerator supply or direct to Cincinnati Doll Co., 311-313 E. Twelfth St., Cincinnati, Ohio.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. Van Deventer (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

Questions

Defunct Companies

No. 2729 (Dealer, Ohio)—"What is the copy of REFRIGERATION NEWS which had a list of electrical refrigeration manufacturers which have gone out of business?"

Answer: Sept. 5, 1934 issue.

Export of Refrigerants

No. 2730 (Student, Washington, D. C.)—"In the process of working out an export problem in the Graduate School of Georgetown University I have occasion to figure out all details concerning a shipment of sulphur dioxide, refrigerant grade, and butane gas to Hongkong, China.

"The shipment will consist of 100 drums of sulphur dioxide in 150 pound drums, and 100 drums of butane gas in 50 pound drums.

"Will it be possible for you to give me data on the two commodities as follows:

"1. The average price per pound prevailing today.

"2. Specifications for crating.

"3. Any loss due to leakage expected.

"4. Can shipment be made in standard steel drums ready for use?

"5. How are charges for fire, marine, and war risk insurance determined?

"6. What are the customary freight charges, and will I more likely be charged according to volume or weight?

"I realize that this is asking for a lot of information but it may be possible that some of the questions can be answered by booklets which you may have available, in which case I would be glad to buy them."

Answer: Relative to sulphur dioxide and butane gas, the most authoritative source of information are Virginia Smelting Co., West Norfolk, Va., and Ansul Chemical Co., Marinette, Wis.

Refrigerator Lift Trucks

No. 2731 (Dealer, Oregon)—"We are a subscriber to your magazine and would like to have the following information.

"It seems to us that some time ago we have seen ads in ELECTRIC REFRIGERATION NEWS describing hand trucks for handling electric refrigerators. We would like to get the name and address of the manufacturer making such an item."

Answer: International Engineering, Inc., Dayton, Ohio, makes the Dayton carrier truck which has been advertised in ELECTRIC REFRIGERATION NEWS.

Other manufacturers of refrigerator life trucks are the Arcade Mfg. Co., Freeport, Ill.; and Self-Lifting Piano Truck Co., 423 N. Main St., Findlay, Ohio.

List of Manufacturers

No. 2732 (Dealer, Italy) — "Being your subscribers, we are very much interested in all literatures concerning household refrigerators, air conditioning etc. and shall be very much obliged to you, if you would be so kind to let us have a complete list of American firms dealing in these lines, to which apply for literature, or let us have, if possible, the same literature."

Answer: Manufacturers of household electric refrigerators are listed on pages 235 and 248 of the 1935 REFRIGERATION AND AIR CONDITIONING DIRECTORY, and manufacturers of air conditioning equipment on pages 150 through 157 of the Directory.

Bottle Cooler Sales

No. 2733 (Manufacturer, Missouri)—"In your Feb. 12 issue, page 20, under heading, '23,031 units sold in 1935 by Commercial Refrigerator Industry,' will you please advise us just which figures refer to wet style bottle coolers?"

Answer: These figures do not include bottle coolers.

However, you will note that the commercial figures released by the National Electrical Manufacturers Association do include beverage coolers, and that the figures for the month of December, 1935, appear on the same page as those of the commercial refrigerator industry, to which you refer in your letter—page 20 of the Feb. 12 issue of ELECTRIC REFRIGERATION NEWS.

The National Electrical Manufacturers Association releases commercial sales figures every month, and these are published in ELECTRIC REFRIGERATION NEWS.

Padded Covers

No. 2734 (Distributor, California)—"We would like to know sellers of refrigerator paper bag covers. Also, we need some padded and tufted cloth covers such as are used for draying refrigerators. If you can supply names of sources of these we shall appreciate it."

Answer: Paper bag covers can be secured from Kimberly Clark Co., Neenah, Wis. Padded covers may be purchased from Bearse Mfg. Co., 3815 Cortland St., Chicago, Ill.

Trailer Ice Boxes

No. 2735 (Cigar Maker, Florida)—"Please give me the names of makers of small steel ice boxes, suitable for cabin trailers."

Answer: Manufacturers of refrigerator cabinets are listed in the 1935 REFRIGERATION AND AIR CONDITIONING DIRECTORY on page 227.

Brine Substitute

No. 2736 (Manufacturer, Virginia)—"Please let us know the name and address of the manufacturer of a Jelly Solution used in the place of brine in ice cream cabinets in connection with dry-expansion coils."

Answer: The Atlas Lumnite Co., 135 East 42nd St., New York City, manufactures a special solution which is used in ice cream cabinets.

Wirf Gaskets, Other Parts

No. 2737 (Service Man, Illinois)—"Am selecting Electric Refrigeration Equipment for a house starting in a wholesale business. We want to install 'Wirf's door gaskets.' Will you please aid me by sending their business office address.

"And will you please connect me with any other concern making compressor gaskets or any line of electric refrigeration appliances."

Answer: Main office of the Wirfs Corp. is 231 La Salle St., Chicago, Ill.

Manufacturers of refrigeration parts are listed in the 1935 REFRIGERATION AND AIR CONDITIONING DIRECTORY on pages 266 through 306.

We also suggest that you read the advertisements covering the latest developments in refrigeration parts as they appear in ELECTRIC REFRIGEPATION NEWS.

Perfection Parts Co.

No. 2738 (Service Firm, Rhode Island)—"Would it be possible for you to give the correct name and address of a gear company, whose name is either Precision Gear Co. or Precise Gear Co. or some such name with the idea of 'perfection.' We understand that this company has recently started to manufacture refrigeration parts and would like to get in touch with them."

Answer: We believe the company to which you refer is the Perfection Refrigeration Parts Co., Harvey, Ill. See their advertisement on page 19 of this issue.

Gordy to Manage Beck & Gregg Appliance Sales

ATLANTA—J. F. Gordy has been appointed manager of the electric appliance department of Beck & Gregg, Crosley distributor in this territory. Mr. Gordy has been identified with appliance distribution in the Southeast since 1919.

The Buyer's Guide

Suppliers Specializing in Service to the Refrigeration and Air Conditioning Industries

Send Today for HARRY ALTER'S NEW 1936 Catalog

Showing America's Biggest Line of

REFRIGERATION PARTS AND SUPPLIES

We are large, dependable refrigeration supply distributors carrying a large stock of nationally known parts and supplies. All shown in a new complete net price catalog—gladly sent on request to refrigeration dealers and service companies. Write today on your letter-head.

FOR ALL MAKES — AIR CONDITIONING AND COMMERCIAL

The HARRY ALTER CO. Inc. — Main Offices — 1728 S. Michigan Ave. Chicago, Ill.

We Carry a Most Complete Line of
Refrigeration Supplies

RSD

Send Your Orders TODAY!!

Federal 1173 — STRICTLY WHOLESALE — ROTARY SEAL REPLACEMENT UNITS FOR ALL POPULAR MAKES

All Orders Shipped SAME DAY!

REFRIGERATION SUPPLIES DISTR.

222 N. Vermont Ave. Los Angeles, Calif.

912-12th St. Sacramento

FOR THE CONVENIENCE OF THE REFRIGERATION TRADE

PARTS SUPPLIES TOOLS for REFRIGERATION AIR CONDITIONING

COMPLETE STOCK

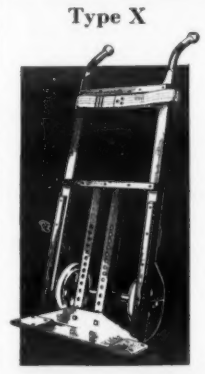
FREE CATALOG AND BUYERS GUIDE

EVERYTHING YOU NEED FROM ONE SOURCE

No matter what parts, supplies or tools you may need for any type of refrigerator or air conditioner, our COMPLETE LINE can meet your requirements promptly. And it's all QUALITY MERCHANDISE. When you deal with Airo you know you can absolutely rely on getting exactly what you order. Airo prices are the very lowest rock-bottom wholesale prices obtainable. You get the benefit of our large volume and careful buying. Orders are shipped the same day received. WRITE FOR NEW, COMPLETE CATALOG. It's FREE.

AIRO SUPPLY CO. 408-10 N. Wells St. CHICAGO, ILL.

Type X



DELIVER YOUR REFRIGERATORS ON RUBBER

***The* DAYTON CARRIER TRUCK**

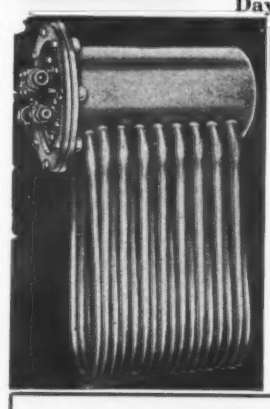
Will not mar — Speeds delivery

Type X - 53" long — Type Y - 70" long, both with 8 inch rubber tired wheels. Fitted with movable foot or with permanent wide foot for skirted bottom cabinets.

Type X with one strap and either foot - **$17.00**
Type Y with one strap and either foot - **$18.50**
f. o. b. Dayton

Write for Bulletin

INTERNATIONAL ENGINEERING INC.
Dayton, Ohio — 15 Park Row, N.Y.



STANDARD STANDS SUPREME

....in the fine art of recalibration of float valves and the silver soldering of evaporation coils . . . for all makes of Ice Cream Cabinets.

WE MANUFACTURE AND REPLACE...Monel Tops Enamel Panels • Tanks Rims and Rim Sleeves ...all other parts for all make cabinets.

STANGARD PRODUCTS
A Division of Standard Body Corp.
430 E. 104th Street, New York
Write for Details

BOUND VOLUMES

Each of the following volumes contains all weekly issues of Electric Refrigeration News issued during a period of four months. Stiff paper board covers.

Vol. 8—Jan. 4 to April 26, 1933. (Serial Nos. 198 to 214.)
Vol. 9—May 3 to Aug. 30, 1933. (Serial Nos. 215 to 232.)
Vol. 10—Sept. 6 to Dec. 27, 1933. (Serial Nos. 233 to 249.)
Vol. 11—Jan. 3 to April 25, 1934. (Serial Nos. 250 to 266.)
Vol. 12—May 2 to Aug. 29, 1934. (Serial Nos. 267 to 284.)
Vol. 13—Sept. 5 to Dec. 26, 1934. (Serial Nos. 285 to 301.)
Vol. 14—Jan. 2 to April 24, 1935. (Serial Nos. 302 to 318.)
Vol. 15—May 1 to Aug. 28, 1935. (Serial Nos. 319 to 336.)
Vol. 16—Sept. 4 to Dec. 25, 1935. (Serial Nos. 337 to 353.)

Price $3.00 per volume, f.o.b. Detroit. Shipment will be made by express collect unless otherwise specified. Please send remittance with order.

Electric Refrigeration News, 5229 Cass Ave., Detroit, Mich.

KASON HARDWARE

Serving Refrigerators the World Over

→ Manufacturers of Fine Refrigerator Hardware ←

KASON HARDWARE CORP., 127-137 Wallabout St., Brooklyn, N.Y.

THE NEWSPAPER OF THE INDUSTRY

ELECTRIC REFRIGERATION NEWS

WRITTEN TO BE READ ON ARRIVAL

Registered U. S. Patent Office

ESTABLISHED 1926. MEMBER AUDIT BUREAU OF CIRCULATIONS. MEMBER ASSOCIATED BUSINESS PAPERS.

VOL. 17, NO. 17, SERIAL NO. 370
ISSUED EVERY WEDNESDAY

Entered as second-class matter Aug. 1, 1927

DETROIT, MICHIGAN, APRIL 22, 1936

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SPECIFICATIONS ISSUE
25 CENTS PER COPY

Chicago Council Given New Code on Refrigeration

Systems Grouped According To Amount Required for Proper Operation

CHICAGO—A proposed new refrigeration code, prepared by the Department for the Inspection of Steam Boilers, Unfired Vessels, and Cooling Plants, has been submitted to the building code sub-committee of the Chicago City Council.

The code is intended as a substitute for the chapter on mechanical refrigeration submitted by the commission for the revision of the city's building code. It was prepared under the direction of Gerald Gearon, supervising mechanical engineer and chief deputy inspector of the department.

Refrigerating systems are classified in the code according to the total weight of refrigerant contained in or required for their proper operation.

A "Class A" system is one containing 1,000 lbs. or more of refrigerant; "Class B," containing more than 100 but less than 1,000 lbs.; "Class C," containing more than 20 but less than 100 lbs.; "Class D," more than 6 but less than 20 lbs.; and "Class E," containing 6 lbs. or less.

For the purpose of the ordinance, refrigerants are classified as follows:

Non-irritant and non-flammable—Class 1: Carbon dioxide (CO_2); Class 2: Dichlorodifluoromethane (CCl_2F_2), F-12; Monofluorotrichloromethane, ($CFCl_3$); Dichlorotetrafluoroethane ($C_2Cl_2F_4$), F-114; Dichloromethane (CH_2Cl_2), Carrene No. 1.

Flammable—Class 1: Methyl chloride (CH_3Cl); Dichloroethylene ($C_2H_2Cl_2$); Ethyl bromide (C_2H_5Br); Methyl bromide (CH_3Br); Class 2: Ethane (C_2H_6); Propane (C_3H_8); Isobutane (C_4H_{10}); Butane (C_4H_{10}); Ethyl chloride (C_2H_5Cl); Methyl formate ($C_2H_4O_2$).

Irritant: Sulphur dioxide (SO_2); Ammonia (NH_3).

"Flammable refrigerants or refrigerants of a poisonous nature," the proposed code reads, "when used in systems containing more than 6 lbs. of refrigerant, shall have added a substance which will impart a pungent odor or an irritating quality to the refrigerant, unless vapors are readily apparent to human sense."

The proposed code classifies as a commercial system "a refrigerating system assembled or installed in a building used for business or commercial purposes." Class 2 refrigerants are not to be permitted in any installation of this type.

Refrigerating systems installed in retail stores, restaurants, wholesale stores, beauty parlors, barber shops, offices, sales rooms, manufacturing spaces, and all similar occupancies are limited and governed by the code, both as to direct and indirect systems.

Limitations on the installation of direct systems include provisions that systems containing a Class 2 non-

(*Concluded on Page 4, Column 5*)

York Six Months Sales Total $6,283,138

YORK, Pa.—Dollar volume of York Ice Machinery Corp.'s sales for the first six months of the fiscal year totaled $6,283,138, as compared with $5,700,004 for the same period a year ago, William S. Shipley, president, reported in a recent letter to stockholders.

In answer to inquiries from new stockholders concerning interim operating statement and the possibility of some capital readjustment, Mr. Shipley explained that a large part of the company's business consists of contracts, including installation, which are not completely executed unitl late in the summer, for which reason it is impractical to issue profit and loss statements before the end of the fiscal year on Sept. 30.

"There has been no discussion of plans by the Board of Directors looking to readjustment of the capital structure," Mr. Shipley added, "nor of any plans for the payment of accumulated dividends on the preferred stock."

Court Approval Is Given in Grunow Reorganization

CHICAGO—Reorganization plan of the General Household Utilities Co., manufacturer of Grunow refrigerators and radios, was approved last Friday, April 17, by Judge Philip Sullivan of the District Court of the United States for the Northern district of Illinois.

The plan of reorganization approved by Judge Sullivan was the one outlined in the March 11 issue of ELECTRIC REFRIGERATION NEWS. Main provision of the plan is a loan of a $1,000,000 to the company by the Reconstruction Finance Corp. to provide new working capital.

Following the filing and approval of attorney's fees and other details which must be handled under the supervision of the court, the company will no longer be operating under Section '77B' of the Bankruptcy law.

Production at the Grunow cabinet and assembly plant in Chicago is now at the rate of between 550 and 600 refrigerators a day, claims H. J. Shartle, sales manager of the company.

Tod Reed Will Direct Grunow Advertising

CHICAGO—Tod Reed, formerly associated with J. Walter Thompson, P. P. Willis, and Frederick & Mitchell advertising agencies, has been appointed advertising manager of General Household Utilities Co. He succeeds J. H. Rasmussen, who recently resigned to accept a position with Zenith Radio Corp.

Widen FHA Powers For Flood Relief

WASHINGTON, D. C.—Powers of the Federal Housing Administration have been amplified for the purpose of giving special aid to sufferers from floods and other catastrophes through an amendment to Title I of the National Housing Act just passed by Congress and signed by President Roosevelt.

Its purpose is to stimulate lending institutions to make the loans necessary to repair the damage which has been or may be caused by earthquake, conflagration, tornado, cyclone, hurricane, flood or other catastrophe in the years 1935 and 1936 by providing insurance through the FHA of loans so made.

No new organization is created for this purpose. All the work will be done through the regular machinery of the Federal Housing Administration. The main points of the new amendment are as follows:

1. Lending institutions are insured against loss up to 10% of all loans made for the purposes of the amendment and, if the insurance reserve so created is not sufficient to pay the losses resulting from such loans, may apply any unused insurance reserve accumulated by them under their contracts of insurance in effect up to April 1, 1936, to such losses. For loans insured under the general provisions of Title I, a new insurance reserve must be built up from April 1, 1936.

2. This amendment provides for the restoration, rehabilitation, rebuilding, and replacement of improvements on

(*Concluded on Page 2, Column 3*)

J. M. Walker Heads Sales For Rex Cole

CLEVELAND—J. M. Walker, formerly New York district manager for General Electric Co., has resigned his position to become general sales manager of Rex Cole, Inc., New York distributor, reports G. J. Chapman, manager of General Electric's specialty appliance sales division.

A. O. Anderson, who has been engaged in department store sales activities for the division, succeeds Walker as New York district manager.

Coincident with this announcement, Mr. Chapman announced the appointment of Lawrence Jennings as eastern manager for General Electric central station sales activities.

By-Pass Patent Decision Upheld By Circuit Court

Decree of District Judge Invalidating Patents Is Confirmed

NEW YORK CITY—United States Circuit Court of Appeals here has affirmed the decision of U. S. District Court Judge Alfred Coxe in the case of Auditorium Conditioning Corp. vs. Warner Brothers Pictures, Inc., invalidating the patents owned by Auditorium on a by-pass system for air-conditioning installations.

Judge Coxe last June had issued a decree holding that claims No. 1, 3, 13, and 14 of the Lewis Reissue patent No. 16,611, and claims No. 1, 13, 14, 17, and 20 of the Fleisher patent No. 1,670,656 were invalid for lack of invention, and this decree has now been affirmed by the U. S. Court of Appeals.

The case heard by Judge Coxe was an infringement suit involving the patents owned by Auditorium which related to air conditioning in theaters, auditoriums, or other large enclosures, where people congregate in considerable numbers. The defendants were charged with operating an infringing system in the Hollywood theater in New York City.

In his decision Judge Coxe said that typical claims of both patents were held valid and infringed by Judge Hazel in *Auditorium vs. Greater Rochester* and by Judge Campbell in *Auditorium vs. St. George.* Neither decision was reviewed by the Circuit Court of Appeals. Judge Coxe goes on to say, however:

"In the present case, the defendants have made an entirely new record, with additional prior patents, publications and uses; and the whole question of the validity of both patents has been relitigated and presented *de novo.* There is no suggestion at this time of estoppel by reason of the decrees in the two previous cases."

In his decree invalidating the patents Judge Coxe said:

"I think the patents must stand or fall on the principle of using with a bypass the recirculated or withdrawn air from the room to temper the cold, saturated air coming from the conditioner. Did this constitute invention? Judge Hazel held that it did, because he thought it was 'a new and novel conception'; and Judge Campbell reached the same conclusion after finding that the by-passing was 'the gist of both of the patents in suit.'

"The practice of mixing cold, condi-

(*Concluded on Page 2, Column 1*)

New Carrier Conditioner Is Self-Contained

NEWARK, N. J.—Introduction of a new self-contained portable summer air conditioner marks one of the first steps made by Carrier Engineering Corp. to enter the lower priced field for air-conditioning equipment, reports Brewster Beach, advertising manager of the company.

Designed for individual rooms, offices, sick rooms, small shops, and homes, the new unit has a steel casing flinshed in dark walnut, and is 40 in. high, 36 in. wide, and 18 in. deep. It will operate with an air-cooled condensing unit and has a capacity of approximately three-quarters of a ton of refrigeration.

Aside from an electrical connection from a standard floor or baseboard outlet, all that is required is location beneath a window, through which outside air for condensing purposes and for ventilation is brought in by means of a duct. A number of household voltages, including direct current, may be used.

A centrifugal type fan circulates cooled dehumified air at the rate of 250 c.f.m. Although multiple units will take care of larger areas, a single unit has ample capacity for spaces from 1,500 to 3,000 cu. ft., according to company engineers.

The refrigerating machine and evaporator coils, fans and controls are all contained within the cabinet, which may be equipped with castors for moving from room to room.

34,898 Units Were Shipped in March By Kelvinator

DETROIT — Kelvinator household refrigerator shipments in March totaled 34,898 units, a 46% increase over the 23,859 units shipped during March of last year, reports V. J. McIntyre, domestic sales manager of Kelvinator Corp.

A 44% increase for the six months ending March 31, 1936, over the equivalent period ending March 31, 1935, was also reported by Mr. McIntyre; with shipments of 94,057 units by March, 1936, as compared with 65,480 for the period ending March, 1935.

C.I.T. Announces 6% Budget Finance Plan On Appliance Sales

NEW YORK CITY — Commercial Investment Trust, Inc., has just announced that a C.I.T. 6% "budget plan" for mechanical refrigerators and other major household appliances is now available to all dealers.

Details of the budget plan include the financing of all major appliances with the exception of washers and cleaners, which, however, may be financed under the same terms if grouped with the sale of eligible major appliances. Credit and collection service will be accomplished through the company's 142 branch offices.

Standard terms which will prevail include: a minimum down payment of 10%; maximum maturity of 36 months; minimum charge of $15; minimum monthly instalment of $4.50.

An anticipated increase in business volume is credited with making possible the adjustment of rates and terms in line with the company's established policy, A. O. Dietz, president of C.I.T., reports.

During the past year a considerable volume of this type of financing was handled by banks and other agencies under government guarantee through the Federal Housing Administration.

Wide acceptance of the plan is expected by company officials because of the popularity of the 6% time payment plan among automobile manufacturers and dealers, and because of its appeal to prospective purchasers who have felt that the withdrawal of FHA financing April 1 would handicap them in their planned budget purchases of new refrigerators.

An institutional newspaper campaign has been launched by the company showing the relationship between lower prices and increased sales, and the part instalment selling plays. Automobiles, refrigerators, oil burners, radios, washers, and other appliances will be treated separately in the series of advertisements.

Parts Makers' Association to Extend Service

Committees Named for Various Product Groups; 46 Now Members

DETROIT—Membership list of the Refrigeration Supplies and Parts Manufacturers Association now totals 46 manufacturers, Frank J. Gleason, secretary of the Association, reported last week.

Mr. Gleason also announced last week that committees are to be formed for each product classification represented in the Association.

"These committees will take up any problem which the manufacturer or jobber may present with respect to policy on a particular product," Mr. Gleason explained. "Formation of these committees eliminates the possibility of any member having to deal with the problems that arise in connection with a product in which he is not interested."

Committee chairmen for the various product classification, who will appoint the two other members of their committee, are as follows:

V-belts: T. C. Davis, Dayton Rubber Mfg. Co.

Controls: F. U. Webster, Cutler-Hammer Co.

Compressors and compressor parts: C. M. Brown, Tecumseh Product Co.

Expansion valves: F. B. Riley, American Injector Co.

Finned surface: H. E. Rieckleman, Fedders Mfg. Co.

Fittings and valves: W. A. Leonard, Imperial Brass Mfg. Co.

Gaskets: Edward Gammie, Victor Mfg. & Gasket Co.

Refrigerants: H. V. Higley, Ansul Chemical Co.

Tubing: Jack Colyer, Wolverine Tube Co.

The Refrigeration Supplies and Parts Manufacturers Association will continue to meet with members of the National Refrigeration Supply Jobbers Association in open meetings to discuss matter of general policy, Mr.

(*Concluded on Page 2, Column 4*)

Lipman Splits Franchise In Nashville Territory

BELIOT, Wis.—General Refrigeration Sales Co. manufacturer of Lipman equipment here, recently appointed two firms to distribute its equipment in the Nashville, Tenn. territory, reports D. G. Fifield, sales promotion manager.

The Fay Rodgers Refrigerator Works will carry Lipman equipment of 2 hp. and under, while the Mechanical Equipment & Refrigeration Co., Inc., will distribute the company's larger sized units in this territory.

Milwaukee Refrigeration Salesmen Earning More Than National Average, Survey Shows

MILWAUKEE—Answers to questionnaires filled out by salesmen who attended a recent sales education meeting sponsored by the Wisconsin Radio, Refrigeration & Appliance Association, showed that the present average monthly income of the Milwaukee appliance salesman is $148.78 as against the $145.45 national average.

Questionnaire answers indicated that 7.5% of the city's appliance salesmen devote their time to store selling exclusively, 28.3% concentrate on outside selling, while 64.2% sell both from the floor and through outside canvassing. These figures compare favorably with those in the national average table, which are: store selling exclusively, 6.9%; outside selling exclusively, 13.1%; combination, 80%.

Approximately 55% of the local salesmen budget their time and follow weekly contact plans. Statistics covering the national averages for appliance salesmen indicate that 52.4% use these methods. Average number of hours which the Milwaukee salesman devotes to his job is given at 8.5%—with 5.1% being spent in interviewing prospects. Comparative figures in the national standards are 8.2% and 4.8%.

Of all sales closed here, 45% are closed in the home, 56.3% are night-closures, 69.3% are closed when the prospect and her husband are interviewed together, and 68.8% involve the use of time payment plans, salesmen declared.

Contrasted with these percentages are the following national figures: 56.0% sales closed in the home, 50% night closures, 90% sales to husband and wife interviewed together, and 80% time payment plan sales.

Figures given in the section of the questionnaire form which covered facts relating to sales contacts, indicate that the salesman working in this city has an all-around better-than-average record. This is shown in the following table in which the first row figures represent local salesmen averages:

Phone calls	29..3	13.8
Personal calls	44.0	20.2
Presentations	22.6	12.3
Demonstrations	14.1	7.8
Call backs on users	13.6	6.5
Total weekly contacts	77.8	62.7
Units sold	8.4	4.3

HOUSEHOLD REFRIGERATOR SPECIFICATIONS ALL MODELS—ALL MAKES COMPLETE IN THIS ISSUE

U. S. Court of Appeals Affirms Decree Invalidating Auditorium Patents

(*Concluded from Page 1, Column 3*)

tioned air with by-passed untreated outside air, in order to raise the temperature and reduce the relative humidity, is fully disclosed in the Rietschel Book (1894), and the Senate Report (1895); and the Hoffman British patent, No. 16,598 (1898), and the Klein patent, No. 1,296,968 (1919), disclose the use of warm air from the room to temper the cold air leaving the conditioner. Klein also shows the mixing of outside air with interior air before entering the conditioner. . .

. . . "It will thus be seen that there was nothing new in the use of a by-pass; or in tempering cold, saturated air with recirculated or warmer air withdrawn from the room; or in mixing outside air with interior air before passing through the conditioner; and any claim of Lewis and Fleisher to invention for those specific ideas must, therefore, necessarily fail.

"The plaintiff insists, however, that the particular organization of the patented systems constituted invention, and that Lewis and Fleisher were the first to develop highly organized apparatus capable at all times of responding to rapidly changing conditions of temperature and humidity both inside and outside the room being conditioned. The difficulty with this contention is that all of the control mechanism of both patents, including the dampers, hygrostats, thermostats, and other apparatus, was old, and it was within the skill of the calling to position and adjust these various devices to fit any desired system. It was conceded also by the plaintiff's expert that automatic controls were mere conveniences and not necessary in the operation of either system. Moreover, the plaintiff itself, in its own booklet, stated that under the old reheating method of the prior art, the dehumidified air leaving the conditioner could be 'accurately controlled at any desired temperature and a good supply of comfortable air furnished to rooms without cold drafts.'

"The Klein patent, No. 1,296,968 (1919) was concededly the best patent reference cited by the defendants in anticipation of both patents in suit; and this patent, in addition to showing the use of a by-pass, and the mixing of inside air before and after it left the conditioner, shows the use of dampers similar to those employed by Lewis and Fleisher. The Klein patent was, however, criticized by the plaintiff as an anticipation principally because of the use of an injector instead of a fan for the purpose of inducing an air current in the wall circuit.

"But Klein expressly states that 'any suitable form of injector may be used for my purpose, or the air from the interior may, if desired, be forced to the place of mixture with the fresh air by means of fans'; and the substitution of a fan in place of Klein's preferred injector produces the identical systems of Lewis and Fleisher. I can see no escape from the conclusion, therefore, that Klein is an anticipation of both patents in suit.

"There may be a decree holding that claims Nos. 1, 3, 13, and 14 of the Lewis Reissue patent No. 16,611, and claims Nos. 1, 13, 14, 17, and 20 of the Fleisher patent No. 1,670,656, are invalid for lack of invention; and dismissing the complaint with costs."

Full text of the decision will be published in next week's issue of the NEWS.

FHA Plan Extended For Relief in Flood Areas

(*Concluded from Page 1, Column 2*)

property damaged or destroyed by floods or other catastrophes occuring in the years 1935 and 1936. Such restoration or rehabilitation may be done with the proceeds of loans not in excess of $2,000 for residential and farm property and not in excess of $50,000 for industrial, commercial, or institutional property.

3. New construction of property destroyed or damaged by these catastrophes is permitted, whether or not the new construction is on the same site occupied by the original structure, or on another site in the same locality. Replacement or repair of eligible equipment and machinery which had been installed in property destroyed or damaged by the catastrophes also is permitted.

4. Operations under the amendment may continue until Jan. 1, 1937, but may be terminated by the President at any time prior to that date upon his determination that the emergency no longer exists.

Wilson Joins Staff of Lincoln Sales Corp.

BALTIMORE — Henry F. Wilson, formerly manager of the Baltimore branch of the Doubleday-Hill Electric Co. has joined the sales staff of the Lincoln Sales Corp., Crosley distributor here, reports C. Howard Buchwald, distributorship president.

Mr. Wilson has been connected with the radio business for the past 10 years.

Committees of Parts Manufacturers Will Handle Problems with Jobbers

(*Concluded from Page 1, Column 5*)

Gleason points out, but problems concerning just one type of product will be handled by the individual committees.

The Parts Manufacturers association is continuing its work of approving parts jobbers who meet the definition and qualifications of a jobber under the standards set up by the manufacturers.

The offices here of Mr. Gleason, who is secretary of both associations, serves as a clearing house for information on new jobbers.

Following is the list of manufacturers who are members of the association:

Alco Valve Co., 2628 Big Bend Blvd., St. Louis, Mo.

American Injector Co.,1481 14th St., Detroit, Mich.

Ansul Chemical Co., Marinette, Wis.

Automatic Products Co., 121 N. Broadway, Milwaukee, Wis.

Automatic Reclosing Circuit Breaker Co., 601 W. 5th St., Columbus, Ohio.

Bohn Aluminum and Brass Corp., 1400 Lafayette Bldg., Detroit, Mich.

Bonney Forge and Tool Works, Allentown, Pa.

Bridgeport Brass Co., Bridgeport, Conn.

Bush Mfg. Co., 100 Wellington St., Muskegan, Mich.

Calco Chemical Co., Bound Brook, New Jersey.

Chicago-Wilcox Mfg. Co., 7701 Avalon Ave., Chicago, Ill.

Cutler-Hammer, Inc., Box 463-4, Milwaukee, Wis.

Dayton Rubber Mfg. Co., Dayton, Ohio.

Detroit Lubricator Co., 5842 Trumbull Ave., Detroit, Mich.

Dole Valve Co., 663 Washington Blvd., Chicago, Ill.

E. I. DuPont de Nemours Co., Wilmington, Delaware.

E. Edelmann and Co., 2332 Logan Blvd., Chicago, Ill.

Electrimatic Corp., 2100 Indiana Ave., Chicago, Ill.

Fedders Mfg. Co., Buffalo, N. Y.

Fredericksen Co., Saginaw, Mich.

Fulton Sylphen Co., Knoxville, Tenn.

L. H. Gilmer Co., Tacony, Philadelphia, Pa.

Henry Valve Co., 1001 N. Spaulding Ave., Chicago, Ill.

Imperial Brass Co., 1200 W. Harrison St., Chicago, Ill.

Jarrow Products Corp., 420 N. La Salle St., Chicago, Ill.

Kellog Connector and Mfg. Co., Rochester, N. Y.

Kerotest Mfg. Co., 2525 Liberty Ave., Pittsburgh, Pa.

Larkin Refrigerating Corp., 519 Fair St., S. E., Atlanta, Ga.

Maurey Mfg. Co., 2913 Wabash Ave., Chicago, Ill.

Mayson Mfg. Co., 4332 Horatio Ave., Detroit, Mich.

Miller Rubber Co., South High St., Akron, Ohio.

Mueller Brass Co., Port Huron, Mich.

McCord Radiator & Mfg. Co., 2587 E. Grand Blvd., Detroit, Mich.

McIntire Connector Co., Newark, N. J.

McQuay, Inc., 1600 N. E. Broadway, Minneapolis, Minn.

Peerless Ice Machine Co., 515 W. 35th St., Chicago, Ill.

Penn Electric Switch Co., Des Moines, Iowa.

Perfection Refrigeration Parts Co., Harvey, Ill.

Rotary Seal Co., 809 W. Madison St., Chicago, Ill.

Sealed Power Corp., 500 Sanford St., Muskegon, Mich.

Square D. Co., 6080 Rivard St., Detroit, Mich.

Tagliabue Mfg. Co., 550 Park Ave., Brooklyn, N. Y.

Tecumseh Products Co., Tecumseh, Mich.

Virginia Smelting Co., West Norfolk, Va.

Victor Mfg. and Gasket Co., 5750 Roosevelt Road, Chicago, Ill.

Wolverine Tube Co., 1411 Central Ave., Detroit, Mich.

Fedders Model 33 and Model 33HC High Capacity Thermostatic Expansion Valves. High vapor charged thermostatic power element . . . easy, sensitive adjustment . . . Stellite tipped needle . . . drop forged seepage-proof valve body,—are a few features responsible for accurate dependable performance.
Patented and Patents Pending

COILS

Fed-R-Fin, Flat Fin, Fluted Fin and Finless Coils . . . Air Conditioning Coils for Refrigerant, Cold Water or Steam . . . Fed-R-Vex Drain Baffles . . . Forcedraft Unit Coolers . . . Ice Cube Making Evaporators . . . Condensers . . . Heat Interchanger Fittings . . .

Are You Getting Your Copy of the FEDDERS NEWS?

FEDDERS

Why it PAYS to STANDARDIZE on the complete line of FEDDERS VALVES

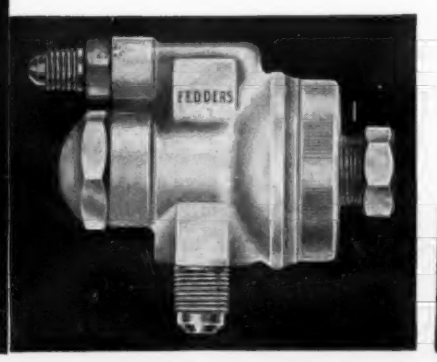
It is important to make a profit on an installation and equally important TO KEEP IT. Dependable, accurate control resulting from sensitive valve operation can make the difference between a system that *gives service* rather than *requires it.* The complete line of Fedders Valves is designed for refrigeration engineers BY REFRIGERATION ENGINEERS.

There is a model and capacity for every requirement from your smallest household job up to your largest commercial and air conditioning installation,—both single and multiple hook-ups.

Designed right . . . built right . . . dehydrated right,—hundreds of thousands of Fedders Valves have met every test of time and field service. Used and sold throughout the world . . . carried in stock by representative suppliers everywhere.

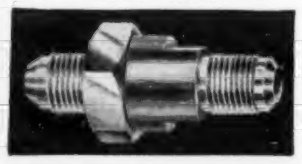
Fedders Model SA-37L & H Two-Temperature Snap Action Valve

Fedders Model CP-35 Constant Pressure Valve



Fedders Model 9940 Automatic Expansion Valve

40TH ANNIVERSARY YEAR FEDDERS



Fedders Model CV-36 Check Valve

FEDDERS MANUFACTURING CO.
57 TONAWANDA ST. BUFFALO, N.Y., U.S.A.

114 E. 16th St., New York
303 E. Sixth St., Cincinnati
209 S. Pearl St., Dallas
603 W. Washington Blvd., Chicago
175 Luckie St., N. W., Atlanta
1501-9 W. Eighth St., Los Angeles

The new

C. I. T.

6%

BUDGET PLAN

REDUCES TIME
PAYMENT COSTS

Display this sign in your windows and showrooms. Get copies of this sign and of the C. I. T. 6% Budget Plan Chart No. 7165 from the nearest C. I. T. Office.

Now Extended to Refrigerators

and Major Mechanical Household Appliances

The new C. I. T. 6% Budget Plan for refrigerator dealers fills the gap left by the withdrawal of F. H. A. Your prospects who were considering a purchase under F. H. A. will welcome the extension of *this* Plan to the appliance field. Alert dealers are adopting and advertising it to help them reach their greater 1936 sales opportunities.

To meet dealers' immediate needs, C. I. T. is passing along to purchasers of refrigerators and other household equipment the benefits of the anticipated increase in budget sales this year.

REFRIGERATORS • AUTOMATIC HEATING • WATER HEATERS • DISH WASHERS • ELECTRIC RANGES • COMMERCIAL REFRIGERATION • ROOM COOLERS and AIR CONDITIONING

Call the nearest C. I. T. Office today

Abilene – Akron – Albany – Altoona
Amarillo – Asheville – Atlanta – Augusta
Bakersfield – Baltimore – Bangor – Bay Shore
Beaumont – Beckley – Billings – Binghamton
Birmingham – Boise – Boston – Bridgeport
Bronx – Brooklyn – Buffalo – Butte – Camden
Cape Girardeau – Carbondale – Cedar Rapids – Charleston – Charlotte – Chattanooga
Chicago – Cincinnati – Clarksburg – Cleveland
Columbia – Columbus – Cumberland – Dallas
Dayton – Denver – Des Moines – Detroit
El Paso – Erie – Evansville – Florence
Fort Wayne – Fort Worth – Fresno – Glens Falls
Greensboro – Greenville – Hagerstown
Harrisburg – Hartford – Hempstead – Hickory
Houston – Huntington, W. Va. – Indianapolis
Jacksonville – Jamaica – Jamestown
Jersey City – Johnson City – Kansas City
Knoxville – Lexington – Lincoln – Little Rock
Los Angeles – Louisville – McAllen – Manchester
Memphis – Miami – Milwaukee – Minneapolis
Mobile – Montgomery – Montpelier – Mt. Vernon
Nashville – Newark – Newburgh – New Haven
New Orleans – New York – Norfolk
Oklahoma City – Omaha – Orlando
Paducah – Paterson – Peoria – Perth Amboy
Phoenix – Philadelphia – Pittsburgh
Portland, Me. – Portland, Ore. – Portsmouth
Poughkeepsie – Providence – Raleigh
Reading – Reno – Richmond, Ind.
Richmond, Va. – Roanoke – Rochester
Rome, Ga. – Sacramento – St. Louis – Salisbury
Salt Lake City – San Antonio – San Diego
San Francisco – San Jose – Scranton – Seattle
Spartanburg – Spokane – Springfield, Mass.
Springfield, Ohio – Stockton – Syracuse
Tampa – Toledo – Tucson – Tulsa – Utica
Washington – Watertown – Wheeling
White Plains – Wichita – Wilkes-Barre
Wilson – Yakima – Youngstown – Zanesville

C.I.T.

C. I. T. CORPORATION • NEW YORK • CHICAGO • SAN FRANCISCO
A UNIT OF COMMERCIAL INVESTMENT TRUST CORPORATION
CAPITAL AND SURPLUS MORE THAN $100,000,000

HELPING DEALERS TO WIDEN THE SCOPE OF THEIR BUSINESS

Wetherbie to Direct G-E Home Building In N.Y. City Area

NEW YORK CITY—J. O. Wetherbie, eastern manager of building equipment for General Electric appliance and merchandising department, was appointed chairman of a management committee to administer the 1936 "New American" demonstration home-building program for the New York area, it was reported following a series of meetings at the G-E home bureau here recently.

A tentative quota of 15 houses to be erected as part of the program in New York City, Long Island, Westchester, Stamford, Bridgeport, and Poughkeepsie was proposed.

Other members appointed to the management committee include: M. D. Grow, of Rex Cole, Inc., Long Island City; Ralph Hansberger, of Gene Meenan, Inc., Brooklyn; A. L. Hart, air conditioning dealer of Patchouge, L. I.; C. M. Schwerin, of Schwerin Air Conditioning Corp., New York City; H. N. Van Cleaf G-E air-conditioning department, New York City; and H. C. Callahan, district manager of the G-E Supply Corp.

At a future meeting of the committee, an executive manager will be appointed who will devote full time to working with builders, power companies, architects, realtors, manufacturers, and others interested in the demonstration home building plan, it was announced.

Department Stores Given 'Employe' Plan by G-E

CLEVELAND—Plan for a new employee sales campaign to boost department store electric refrigerator sales has been made available by the appliance and merchandise department of the General Electric Co.

Known as the "Prospect Finding" campaign, the plan involves a months refrigerator drive in which cass bonus awards are offered to department store employees who contribute prospect leads on which sales are closed by salesmen of the appliance department. A plan for competition between various departments, with other prizes, also has been worked out.

Included with the campaign plan are suggestions for window display and special promotions, according to R. C. Cameron, head of department store activities for the specialty appliance division.

Novel Advertisement Used by Harrison On Anniversary

NEWARK—To capitalize on the publicity attendent with the Philip H. Harrison & Co.'s recent celebration of its 10th anniversary as General Electric distributor, and its concident change of location from East Orange to a new-story building at 191 Central Ave. here, the company ran a novel type of full-page newspaper advertisement in a recent Sunday edition of the leading local paper.

With a picture of a modern housewife working in an all-electric kitchen as its central figure, top half of the page graphically told the story hidden behind its headline: "100 Years of Homekeeping Progress," through a series of 14 illustrations, seven of which were photographic likenesses of housewives working with 1936 G-E equipment. Contrasted with these were seven caricature sketches depicting the old-fashioned house-keeping methods employed by women of the preceeding generation.

Lower half of the page contained a picture of the new Harrison store, a list of the company retail stores, and information on its service policies.

In its new quarters, which contains 45,000 sq. ft. of floor space, the company now has its product, sales, and operating departments housed in one building.

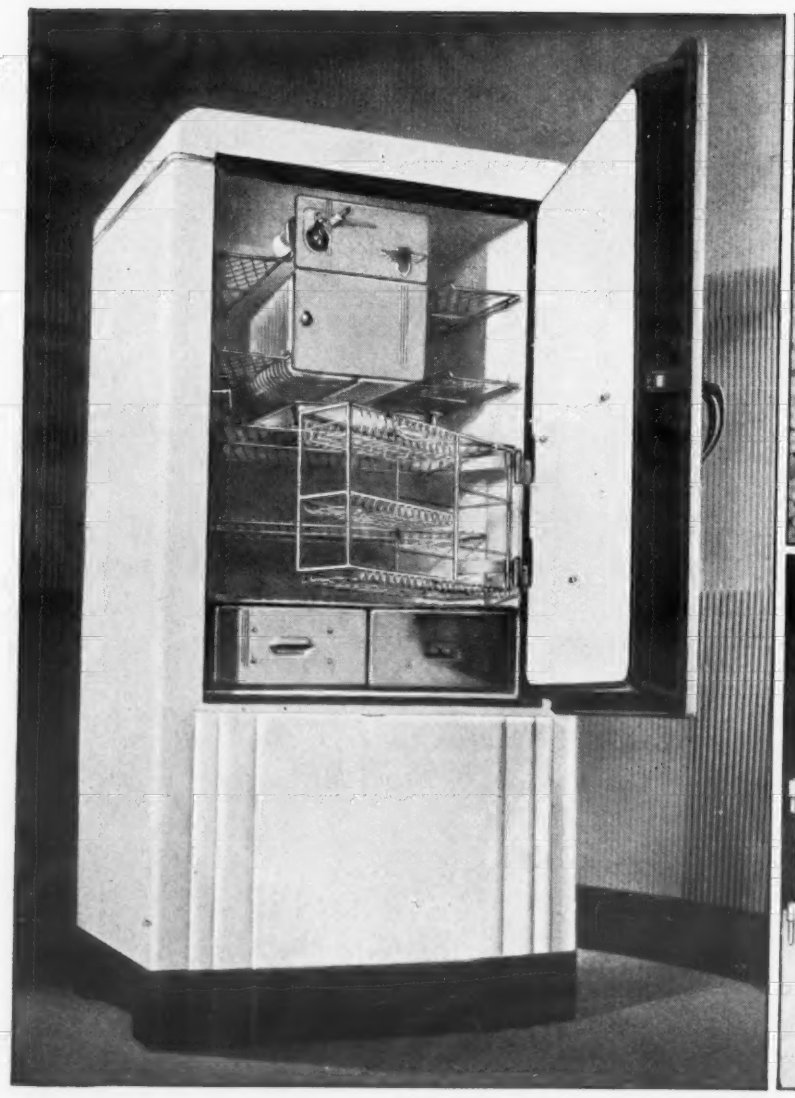
Shortly after moving, the company announced several changes in its personnel. Thomas E. Babson, who has been sales promotion and advertising manager for nine years has been appointed retail sales manager to succeed H. M. Landemare, who resigned. Replacing Mr. Babson, is John Eick, Jr. who has been secretary to Mr. Harrison since 1929. Miss A. M. Chia is now secretary to Mr. Harrison.

Mr. Harrison also announced the opening of a new dealership at 72 Washington St., Bloomfield, N. J., which is under the management of L. Hauber.

Several officials of the General Electric Co. were present at the testimonial dinner given for Mr. Harrison in honor of his Anniversary celebration. Among them were: P. B. Zimmerman, J. M. Walker, A. O. Anderson, A. W. Lunn, J. F. Quinlan, and Lee Williams.

The dinner, which was held at the Club El Cazer, was attended by 175 of Mr. Harrison's dealers, personal friends, and business associates. O. W. Nelson was toastmaster.

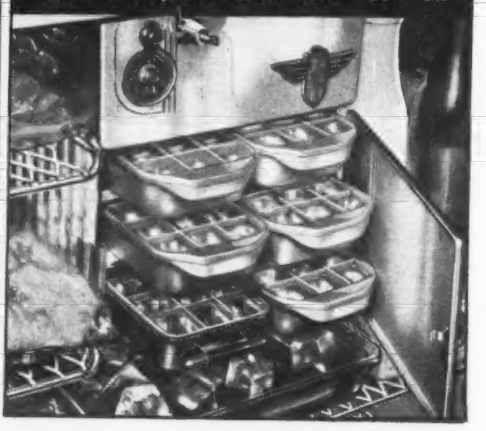
SALES DOUBLE ...As Women Discover SAV-A-STEP and SLID-A-TRAY



SAV-A-STEP swings on its own hinges—or snaps instantly onto door. Turns rear space into "front" space, giving ⅓ more easily-reached food room.

The hidden SLID-A-TRAY appears at a touch—holds almost a shelf-full of food at once on tip-proof diamond-grid shelving—frees hands for rearranging.

SAV-A-STEP lifts out easily with everything for a whole meal. Saves steps—saves current wasted by repeated opening of refrigerator door.



An abundance of ice cubes or frozen dessert is ready in a jiffy with this improved speed-freezer—the first with lighted airplane-dial cold control.

Two Stewart-Warner Scoops Head List of Hit Features That Are Smashing Sales Records for Dealers Everywhere

UP—up—up go dealer sales and profits wherever the new Stewart-Warner is displayed! The word's out everywhere that the hot line this year is Stewart-Warner. *Actual sales* the country over are already more than double those in the same period last year!

Why? Because Stewart-Warner gives you real improvements the housewife can see and understand and use—more of them than any other refrigerator so far introduced. There's SAV-A-STEP—the wonderful food rack that gives 1/3 more easy-to-reach food space than other refrigerators the same size. And SLID-A-TRAY—the bigger, sturdier, hidden rearranging shelf that appears at a touch. And the huge, improved speed-freezer with the first lighted airplane-dial freezing control. And many, many others that make sense the minute the prospect sees them—without need of arguments or statistics.

Dealers who got aboard early are cheering over their refrigerator sales right now. But it's not too late to give *your* balance sheet a break. Let your Stewart-Warner distributor show you all the good news right now. Learn about the features—the *optional* 5-year protection plan—the amazing economy *facts* that make this refrigerator a hit with buyers. Then learn about the record freedom from service that lets you keep your profits after you make them—and the new finance plan that makes selling easier than ever.

Stewart-Warner Corporation, Chicago, Illinois

STEWART-WARNER

Proposed Code for Chicago Would Require Tests

(*Concluded from Page 1, Column 1*)

irritant and non-flammable refrigerant shall not have a total refrigerant content exceeding 300 lbs., and that the compressor, condenser, and shell-type apparatus of systems containing more than 100 lbs. shall be placed in a machinery room with a means of ventilation directly to the outside; that systems with over 20 lbs. of such a refrigerant, located where there is apparatus to produce an open flame, shall be equipped with a leak alarm device that will give a signal sufficient to attract attention in case as much as a gallon of refrigerant should escape from the system, unless the apparatus to produce the flame is vented so as to carry all products of combustion directly to the outside.

Systems containing up to 200 lbs. of irritant or Class 1 flammable refrigerant may be installed in buildings frequented by employees only, if the operating mechanism is kept in a separate room, with ventilation; systems containing up to 100 lbs. may be installed on the first floor or basement of buildings to which the public is admitted, if the machinery is housed in a separate room, and the first floor has exits opening outdoors.

Systems containing 50 lbs. or less of irritant or Class 1 flammable refrigerant may be installed on any floor above the first floor of buildings to which the public is admitted; but unit systems only may be used in retail stores, restaurants, and other locations where the number of employees serving the public exceeds 10.

On indirect systems of refrigeration, limitations include provisions that systems containing a non-irritant and non-flammable refrigerant may be installed in the basement or on the first floor, if all parts of the system containing more than 300 lbs. of refrigerant are installed in a separate machinery room; that systems with 300 lbs. or less of this type of refrigerant may be installed above the first floor if the refrigerant-containing parts of such systems are put in a separate machinery room, with ventilation. That such systems may be placed above the roof, if put in a machinery room, provided all openings from such room are made to the outside and are not located adjacent to the entrance or exit of any stairway, elevator shaft, or fresh air intake.

"No multiple dwelling system," the code provides, "shall contain over 50 lbs. of sulphur dioxide, 50 lbs. of methyl chloride, or 100 lbs. of F-12.

"No evaporator shall be placed in a sleeping room.

"No evaporator shall be placed in a room having adjoining rooms, the combined cubical contents of which has less than 4,000 cu. ft. and any part of which is used for sleeping purposes, unless such rooms are provided with a window, or windows, the total window area of such being not less than 10% of the floor area of such rooms; and unless such window, or windows, shall open to the outside air and be so constructed that at least one-half of such window, or windows, can be readily opened."

The code requires that tests be made to all systems installed in the city, such tests to be made in the presence of an inspector for the department, before the system is put into use.

On single unit systems, however, the manufacturer may make such tests before the equipment is shipped, and give the department a report of the results.

Owners of all systems, except those in Class D or E, are required to post near such system a card giving directions for its operation and precautions to be observed in case of a breakdown or leak.

Every single unit system, the code provides, shall have attached in a permanent manner and in a conspicuous place a metal tag or other emblem showing the maker's name, kind and amount of refrigerant used, and the test pressures applied. All Class A, B, C, and multiple Class D systems must have the name of the refrigerant painted or attached either to the pressure imposing element or to the piping nearby. Kind of refrigerant and instructions for shutting it off must be posted at the branch valves.

Complete text of the code will be published in next week's issue of ELECTRIC REFRIGERATION NEWS.

Detroit Refrigeration Men To Banquet Thursday

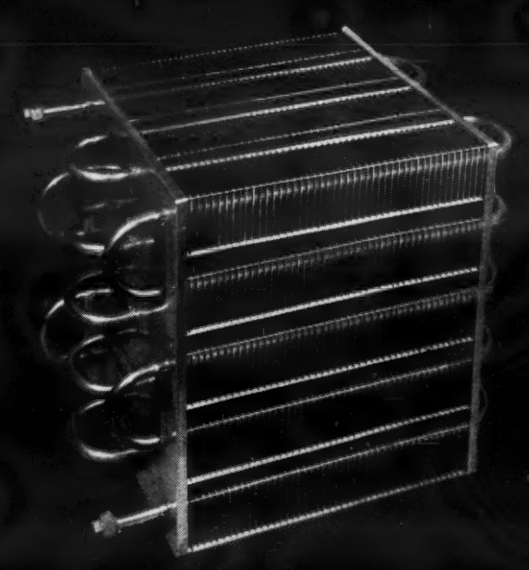
DETROIT—Detroit Refrigeration Contractors, Inc., will hold its "association banquet" at 8 p. m. on Thursday, April 23, in Hotel Webster Hall here.

B. A. Barnes is chairman of the committee making arrangements for the affair.

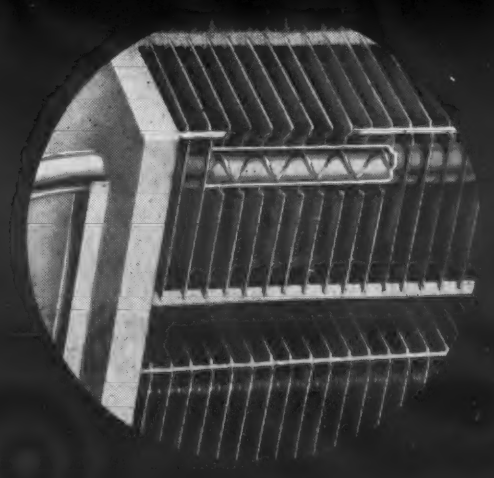
Officers of the organization are: J. E. Perry, president; E. Johnson, vice president; George Racklyeft, secretary; and William G. Erth, treasurer.

A NEW COOLING UNIT PROGRAM

SALES-MAKING FEATURES THAT GIVE FASTER COOLING • QUICKER DEFROSTING • GREATER CAPACITY—Aluminum fins and tinned copper tubing mean *less weight per unit*, allow *quicker pull down*, and permit *quick defrosting*.



CONTINUOUS TUBING in all sizes of coils eliminates soldered return bends and attendant possibility of leaks. *Compression-Locked Fins* provide direct contact between fins and tubing for quicker heat transfer and a stronger, more rigid unit. *Corner-Locked Fins* strengthen the construction, protect the corners, and prevent fins from being twisted or bent out of shape.



SPIRAL REFRIGERANT DEFLECTOR whirls the refrigerant around the entire inside surface of the tubing—insures more rapid heat transfer, increases cooling capacity, and improves the operation of expansion valves by eliminating surges or liquid refrigerant.

SPACE SAVING is achieved by the efficient heat-transfer ability and compact construction of the new Kelvinator cooling units. Their striking appearance and bright metal finish appeal to every prospect. They are provided to meet every requirement of refrigerated cases, walk-in coolers, and reach-in refrigerators as well as sub-freezing cooling urits.

New profit opportunities FOR commercial dealers

The profit outlook is exceedingly bright for Kelvinator dealers who hold commercial refrigeration franchises. A new cooling unit program, just announced, is being acclaimed as one of the reasons why.

A Bigger Market

Now, Kelvinator dealers can sell for any requirement. No job too small, no job too large, no job too difficult to fit! No longer any question about which standardized coil *might* do, or what the warehouse may have in stock! The exact type and size cooling unit that the customer should have is always available under Kelvinator's broadened Exact Selection plan.

24-Hour Deliveries

Just as valuable to these dealers is Kelvinator's ability to make immediate deliveries. 24 hours after an order is received shipment is made. New automatic machinery insures that rush orders are handled with the same precision, with the same uniformity and accuracy of construction, as regular production.

New Low Prices

Naturally, the far-reaching effects of this program have resulted in tremendous increases in sales and corresponding reductions in selling prices. Kelvinator dealers have *everything* in their favor.

Dealers Select Their Own Franchise

There are four big-profit Kelvinator commercial franchises—Automatic Heating, including coal as well as oil burning units; Liquid Cooling, with the finest beverage coolers on the market, and a complete line of water and milk cooling equipment; Air Conditioning, embracing every need from small self-contained units to large central plants; and the Exact Selection Commercial Refrigeration franchise backed by a new full-profit policy. Dealers select the lines they are equipped to handle, assume no obligations in fields they hesitate to enter. Perhaps you might qualify for one of these valuable franchises. Call your nearest distributor, or write Kelvinator Corporation, Commercial Franchise Dept., Detroit, Michigan.

KELVINATOR

GENERAL ELECTRIC

General Electric Co., Appliance & Merchandising Dept., Cleveland, Ohio.

Model No.	M-4	M-5	T-5	M-6	SM-66	M-7	T-7	TM-9	V-4	V-5	V-7	LK-1	LK-2	KF-3	KF-12	KF-15
Compressor Model No.	CG-1	CK-1	CK-1	CK-2	CK-15	CK-2	CK-2	CK-30	CF-1	CF-1	CF-2	LK-1	LK-2	CM-311	CM-34	CM-34
PRICE	First Zone															
Retail price, installed	$129.50	$164.00	$189.00	$199.00	$174.50	$234.00	$269.00	$315.00	$139.50	$174.00	244.00	$ 79.50	$ 84.50	$119.50	$430.00	$490.00
Cabinet finish, exterior	Glyptal		Porc.	Glyptal			Porcelain		Glyptal						Porcelain	
CABINET DIMENSIONS																
Overall height (inches)	61⅞	64½	65¼	63⅝	61⅛	66	67¼	68	52⅞	52⅞	56⅞	36	36	35⅝	62½	62½
Overall width (inches)	23½	24	24	28⅞	28⅞	28⅞	28⅞	34¼	23½	27¼	30	21	21	24	39	46
Overall depth (inches)	19⅞	21½	21½	22¾	22¾	22¾	22¾	26¼	24⅜	24⅜	26¾	23⅞	23⅞	22⅞	28	28
Inside height (inches)	27¼	32¾	32¼	32	32⅛	33¾	33⅞	34⅞	28½	28½	32½	13¼	13¼	18⅜	37	37
Inside width (inches)	18½	18	18	22	22	22⅞	22⅞	27⅛	18	21¾	24	16	16	19⅜	33	40
Inside depth (inches)	14¾	15⅞	16	16½	16⅝	16⅞	17	19⅛	15¼	15¼	17	16	16	15⅜	19½	19½
Number of doors	1														2	2
STORAGE CAPACITY																
Net food storage (cu. ft.)	4.0	5.1	5.0	6.4	6.6	7.2	7.2	9.6	4.3	5.2	7.0	2.0	2.0	2.9	12.5	15.4
Number of shelves	3	3	3	3	3	3	3	3	3½	3½	3	..	..	1½	4	4½
Total shelf area (sq. ft.)	8.1	8.9	8.9	11.8	11.0	12.5	12.5	16.1	8.6	10.2	13.0	..	..	5.7	22.7	31.3
Cabinet finish (interior)	Porcelain															
INSULATION																
Top (thickness in inches)	2½	2½	2½	2½	2½	2½	2½	3	2⅛	2⅛	2⅛	..	..	2	2¼	2¼
Sides	2⅜	2⅝	2½	3	3	2½	2½	2⅞	2⅝	2⅝	2⅞	2½	2½	2⅛	2¾	2¾
Back	1⅞	2¾	2¼	2¾	2¾	2⅜	2½	2⅞	1⅞	1⅞	2½	3⅝	3⅝	1⅝	3⅛	3⅛
Door	2⅞	3⅛	3¼	3⅛	3⅛	3⅛	3¼	3⅜	3½	3½	3½	2	2	3¼	3¼	3¼
Bottom	2⅛	3	2⅞	2⅛	2⅛	2⅝	3⅞	3⅞	2½	2½	2½	2½	2½	1¾	3	3
ICE CUBES																
Number of shallow trays	2	2	2	4	2	4	4	4	2	2	4	2	2	2	6	6
Number of deep trays	0														1	1
Total number of cubes	40	40	40	84	40	84	84	84	40	40	84	20	20	40	128	128
Total weight of cubes (lbs.)	4	6	6	8	6	11	11	11	4	6	11	2	2	4	14½	16½
COMPRESSOR																
Ice melting effect 24 hrs. (lbs.)	83	83	83	92	88	92	92	125	83	83	92	80	80	..	176	176
Motor horsepower	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/8	1/8	1/8	1/8	1/8	1/6	1/3	1/3
Refrigerant in system (lbs.)	1½ to 3¼															
Quantity of lubricant (pts.)	4													1⅛	1⅛	1⅛
Belt circumference (inches)	No Belts													33	35	35
Belt width (64ths of an inch)	No Belts													26	26	26
WEIGHT																
Net weight (lbs.)																
Shipping weight (lbs.)	255	352	362	488	462	500	506	700	320	340	415	173	186	...	762	862
Control Model No.	MIA80	MIA120	MIA120	MIA121	MIA130	MIA121	MIA121	MIA122	MIA78	MIA78	MIA78	MIA65	MIA65	MIA72	MIA87	MIA87

COMPRESSOR

Made by General Electric, CM-311, CM-34, open; all others, sealed; reciprocating; CM-311, CM-34, belt-driven; all others, direct-driven; compressor located above on M and T models; below food compartment on all others.

Compressor Model No. CF-1, CF-2, LK-1, LK-2, CG-1, CK-1, CK-2, CK-15—single cylinder, 1,740 r.p.m., 1¼-in. bore, 0.66-in. stroke.

Compressor Model No. CM-34—twin cylinder, 550 r.p.m., 1½-in. bore, 1⅝-in. stroke.

Compressor Model No. CK-30—single cylinder, 1,740 r.p.m., 1¼-in. bore, 0.85-in. stroke.

Above data not supplied on compressor Model No. CM-311.

Refrigerant, sulphur dioxide. Lubricant, mineral oil.

Shaft seal, bellows on CM-311, CM-34; none on others.

CABINET

Made by General Electric. Steel frame with Thermocraft insulation, Textolite breaker strip, hollow moulded rubber gasket.

HARDWARE

Made by General Electric. Brass with chrome-plate finish.

MOTOR

Capacitor type on CM-311, CM-34; split-phase induction type on all others; made by G-E. Oil capacitor annually, others never.

CONDENSER

Made by General Electric, fan cooled on KF models, natural draft cooled on others. Finned tube on KF; steel-plate type on others.

EVAPORATOR

General Electric stainless steel folded and welded plate type. High side float refrigerant control. Anodic aluminum and rubber ice trays. Ice tray release.

CONTROL

Adjustable on all models except M-4 and LK-1, 2; temperature; mounted outside the cabinet except on KF and V models. Manual defrosting on M-4 and LK-1, 2, wide cycle on all others with vacation cycle. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Five-year replacement contract on sealed unit; one-year service contract on conventional (KF) models.

Serviced by: Dealers and distributors.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES

Forced feed lubrication, oil cooling of motor and compressor, self aligning bearing, oil pressure operated unloader, acoustic mufflers, metal glass electric leads, ice trays in direct contact with refrigerated surfaces, injectors in evaporators, cast aluminum rotor in motor, all connections silver soldered or welded, interior light, foot pedal door opener, covered vegetable pans or drawers, sliding shelves, flat wire shelves, left-over dishes.

KELVINATOR

Kelvinator Corp., Detroit, Mich.

Model No.	K3-36	KS5-36	KS6-36	K4-36	K5-36	K6-36	K7-36	PK5-36	PK6-36	PK7-36	SD7-36	SD9-36	SD13-36	SD17-36
Compressor Model No.	A9116D	A9116D	B9116D	A9116D	A9116D	B9116D	B9116D	A9116D	B9116D	B9116D	B9116E	B9125G	B9125H	B9125H
PRICE														
Retail price, installed	$104.50	$144.50	$164.50	$129.50	$164.50	$189.50	$219.50	$184.50	$209.50	$249.50	$324.50	$385.50	$534.50	$684.50
Cabinet finish, exterior	Dulux							Porcelain						
CABINET DIMENSIONS														
Overall height (inches)	45⅛	54¼	57	49⅞	55¾	58⅝	61	56	58⅞	61¼	61¼	66¾	66¾	73¾
Overall width (inches)	24	27⅝	29⅛	24	28⅜	29⅞	32⅛	28⅜	29⅞	32⅛	32⅛	34½	48	50¼
Overall depth (inches)	25	26⅜	26⅜	25⅝	26¼	26¼	26¼	26¼	26¼	26¼	28¾	28¾	29	29
											*G.S. F.S.	G.S. F.S.	G.S. F.S.	G.S. F.S.
Inside height (inches)	19½	27⅜	30⅛	24½	27⅜	30⅛	32⅛	27⅜	30⅛	32⅛	24¾ 4⅝	30 4⅝	35½ 33⅝	42½ 40⅝
Inside width (inches)	18⅜	20⅝	22⅛	18⅜	20⅝	22⅛	24⅜	20⅝	22⅛	24¼	24¼ 21	26¾ 23½	27⅜ 11¼	29½ 11¼
Inside depth (inches)	17	17	17	17	17	17	17	17	17	17	18⅝ 13½	18⅝ 15½	18⅞ 17⅜	18⅞ 17⅜
Number of doors	1												2	2
STORAGE CAPACITY														
Net food storage (cu. ft.)	3.16	5.25	6.17	4.15	5.16	6.16	7.18	5.16	6.16	7.18	7.04	9.20	13.12	16.79
Number of shelves	4	5	5	5	5	5	5	5	5	5	4	5	5	7
Total shelf area (sq. ft.)	8.12	12.01	13.17	10.37	12.06	12.79	14.81	12.06	12.79	14.81	13.80	18.51	25.92	31.86
Cabinet finish (interior)	Porcelain													
INSULATION														
Top (thickness in inches)	3½	3½	3½	3½	4⅞	5	5⅜	3⅝	3¾	4	4	4¼	5	5
Sides	2½	3¼	3¼	2½	3¼	3¼	3¼	3⅛	3⅛	3⅛	3⅛	3⅛	3¾	3¾
Back	2½	3¼	3¼	2½	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	4	4	3⅛	3⅛
Door	3⅛	2½	2½	3⅛	3¼	3⅜	3⅜	3¼	3⅜	3⅜	3⅜	3⅜	3⅛	3⅛
Bottom	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3¼	3⅝	3⅝
ICE CUBES														
Number of shallow trays	2	3	3	2	4	4	6	4	4	6	4	4	8	10
Number of deep trays	0	0	0	0	1	1	1	1	1	1	2	2	2	2
Total number of cubes	42	63	81	40	80	80	120	80	80	120	176	187	240	280
Total weight of cubes (lbs.)	4	6.75	10.5	4.5	9	9	13.5	9	9	13.5	21	23.5	26	30.5
COMPRESSOR														
Ice melting effect 24 hrs. (lbs.)														
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/4	1/4	1/4
Refrigerant in system (oz.)	24	35	36	33	35	33	36	35	33	36	31	31	38	44
Quantity of lubricant (oz.)	19	19	24	19	19	24	24	19	24	24	24	24	24	24
Belt circumference (inches)	31⅛												47¼	47¼
Belt width (64ths of an inch)	38												48	48
WEIGHT														
Net weight (lbs.)														
Shipping weight (lbs.)	275	350	390	304	356	396	420	414	445	476	525	600	950	1100

*G.S.—General storage; F.S.—frozen storage compartment.

COMPRESSOR

Made by Kelvinator, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, bellows.

Compressor Model No. A9116D, B9125G—twin cylinder, 525 r.p.m., 1¼-in. bore, 1½-in. stroke.

Compressor Model No. B9116D—single cylinder, 410 r.p.m., 1¼-in. bore, 1½-in. stroke.

Compressor Model No. B9116E—twin cylinder, 410 r.p.m., 1¼-in. bore, 1½-in. stroke.

Compressor Model No. B9125H—twin cylinder, 640 r.p.m., 1½-in. bore, 1¾-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, Kelvinator.

CABINET

Made by Kelvinator, steel and wood frame with Kelvinator insulation, Kelvalyte (composition bakelite) breaker strip, rubber balloon-type gasket.

HARDWARE

Made by Kelvinator. Chrome finish, white ivory trim on all but K3-36, KS5-36, KS6-36.

MOTOR

Condenser start-induction run type made by Emerson and Delco. Oil every 3 months.

CONDENSER

Kelvinator fan cooled, continuous fin and tube condenser.

EVAPORATOR

Made by Kelvinator of Armco iron, porcelain on steel. High side float refrigerant control. Anodic aluminum ice trays. Rubber grids in all trays (except KS5-36 and KS6-36).

CONTROL

Ranco adjustable temperature control. Model KR on PK, K, and KS units; KJ on SD units; mounted inside the cabinet. KR has semi-automatic defrosting with vacation cycle, KJ has manual defrosting (no defrosting necessary in food compartment). Current and temperature (Fusetron) overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One-year warranty, plus four-year Protection Plan, providing for free replacement of any necessary compresser mechanism.

Serviced by: Dealers only.

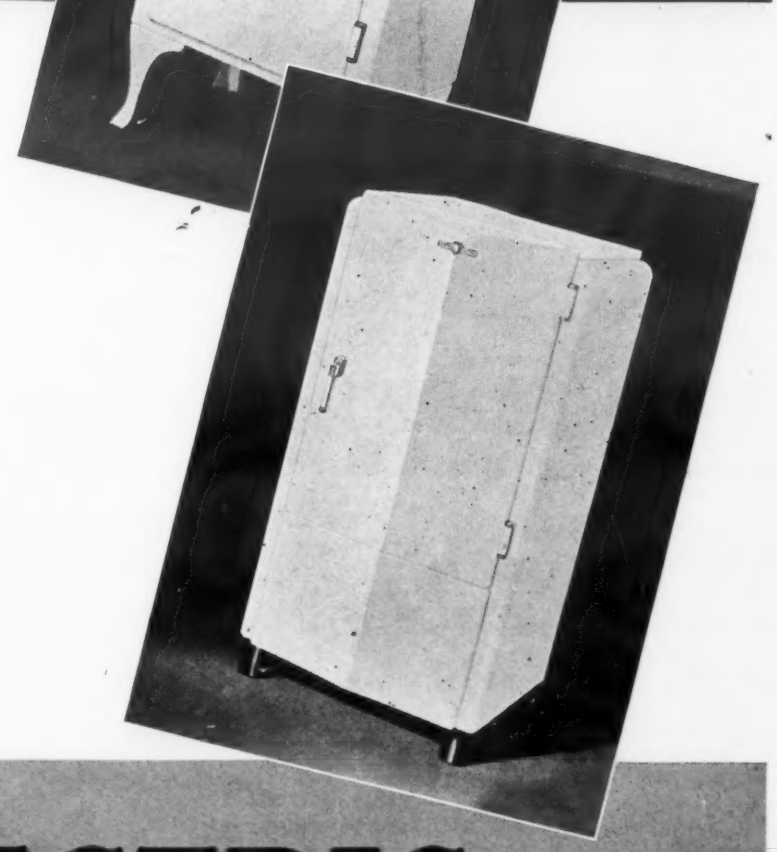
SPECIAL FEATURES

All Models—Welded steel cabinet; bar-type shelves; rubber shelf supports; glass defrosting tray.

Additional Features of Various Models—Automatic interior light (except model K3-36); vegetable crisper with serving tray cover of black bakelite (porcelain crisper top on models KS5-36 and KS6-36; no crisper on model K3-36); built-in thermometer (except on models K3-36, KS5-36, and KS6-36); utility basket (except on models K3-36, KS5-36, KS6-36, SD13-36, and SD17-36); sliding shelf, extra double-depth tray, and sorting tray—models K5-36, K6-36, K7-36, PK5-36, PK6-36, and PK7-36; ice tray release (except on models K3-36, K4-36, KS5-36, and KS6-36); refrigerated shelf—models K7-36 and PK7-36 only.

SD Model Features—(besides those of K and PK models with exceptions noted)—Two temperature cabinet with two separately insulated one-piece porcelain chambers for food storage and freezing; non-frosting cooling unit in food compartment; forced air circulation; air purifier and deodorizer; sorting tray; vegetable drawer with crisper (models SD7-36 and SD9-36 only); utility drawer (models SD13-36 and SD17-36 only); thrift drawer with three china dishes; covered china mixing bowl and refrigerated rolling pin; water pitcher; fast-freezing on all ice tray shelves; dry cube trays.

Every minute of every day somebody buys a General Electric Refrigerator!



• IT SEEMS EVERYBODY is buying a General Electric Refrigerator! More and more refrigerator shoppers are discovering that it *costs less to own* a General Electric. Its savings over a cheaper, less efficient refrigerator in operating costs alone, soon more than pay any difference in original price—and a G-E is just as easy to buy!

Introduced in 1927, the General Electric Refrigerator already numbers satisfied users by the million. Every walk of life, every size of income is represented by these enthusiastic owners—bankers and bus drivers, policemen and yachtsmen, senators and stenographers are buying General Electrics.

RESEARCH KEEPS GENERAL ELECTRIC YEARS AHEAD!

The economy and dependability of the "ageless" General Electric sealed-in-steel mechanism have been proved by billions of hours of matchless service. G-E cabinet appointments are chosen for their PRACTICAL convenience features. The General Electric retailer has no expensive, profit-eating service problems and complaints either with the refrigerator mechanism or with "gadgets." General Electric Company, Appliance and Merchandise Department, Section DF41, Nela Park, Cleveland, Ohio.

GENERAL ELECTRIC

ALL-STEEL REFRIGERATORS

FRIGIDAIRE

Frigidaire Corp., Dayton, Ohio.

Model No.	Kold-chest	D3-36	DRS5-36	DRS6-36	Master 4-36	Master 5-36	Master 6-36	Master 7-36	Super 4-36	Super 5-36	Super 6-36	Super 7-36	Super 9-36	WP12-36	WP15-36	Premier	Imperial
Compressor Model No.	Sealed in													FH336	FH336	FH336	FH336
PRICE	Zone 1 prices																
Retail price, installed	$ 84.50	$104.50	$144.50	$164.50	$129.50	$164.50	$189.50	$219.50	$154.50	$184.50	$209.50	$249.50	309.50	$379.50	$471.50	$436.50	$526.50
Cabinet finish, exterior	Dulux								Porcelain								
CABINET DIMENSIONS																	
Overall height (inches)	36	44⅜	53¼	56⅞	50¼	54⅝	58¼	59¼	50¼	54⅝	58¼	59¼	60¼	63¾	64	63¾	64
Overall width (inches)	23⅞	22⅝	28⅜	30⅛	24¼	28⅛	29¾	31⅛	24¼	28⅛	29¾	31⅛	32¼	38⅛	46¾	38⅛	46¾
Overall depth (inches)	20½	22½	24¼	24¼	25	25	25	25⅛	25	25	25	25⅛	27⅝	30½	30½	30½	30½
Inside height (inches)	14¾	23¼	29⅝	33⅛	27½	29⅝	33⅛	34⅛	27½	29⅝	33⅛	34⅛	35⅛	35⅜	35⅜	35⅜	35⅜
Inside width (inches)	19⅛	17⅞	22½	24	19⅛	22½	24	25½	19⅛	22½	24	25½	26⅝	32	39¾	32	39¾
Inside depth (inches)	13⅝	13¼	14	14	14	14	14	15⅛	14	14	14	15⅛	17⅝	19⅝	19⅝	19⅝	19⅝
Number of doors	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2
STORAGE CAPACITY																	
Net food storage (cu. ft.)	2.1	3.1	5.1	6.2	4.1	5.1	6.2	7.2	4.1	5.1	6.2	7.2	9.1	12.1	15.1	10.0	13.1
Number of shelves	2	3	3	4	3	3	4	4	3	3	4	4	4	9	8	5	6
Total shelf area (sq. ft.)	4.1	6.4	10.7	13.6	8.9	10.7	13.6	15.8	8.9	10.7	13.6	15.8	19.3	24.6	29.4	19.6	26.6
Cabinet finish (interior)	Porcelain																
INSULATION																	
Top (thickness in inches)	..	2	2	2	2	2	2	2	2	2	2	2	2	2½	2½	2½	2½
Sides	2	2	2¼	2¼	2	2¼	2¼	2¼	2	2¼	2¼	2¼	2¼	2½	2½	2½	2½
Back	2	2	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½	2½
Door	1½	2	2¼	2¼	2¾	2¾	2¾	2½	2¾	2¾	2¾	2½	2½	2¾	2¾	2¾	2¾
Bottom	2	2	3	3	3	3	3	3	3	3	3	3	3	2½	2½	2½	2½
ICE CUBES																	
Number of shallow trays	2	2	3	4	2	4	4	6	2	4	4	6	6	6	8	6	6
Number of deep trays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1*	1*
Total number of cubes	36	41	63	84	41	83	83	120	41	82	82	120	136	156	208	156	156
Total weight of cubes (lbs.)	3	4	6	8	4	8	8	12	4	8	8	12	14	19	25½	19	19
COMPRESSOR																	
Ice melting effect 24 hrs. (lbs.)																	
Motor horsepower	1/16	1/16	1/12	1/12	1/16	1/12	1/12	1/7	1/16	1/12	1/12	1/7	1/7	1/3	1/3	1/3	1/3
Refrigerant in system (oz.)	14	15	19	19	18	19	19	23	18	19	19	23	26	54	58	58	58
Quantity of lubricant (oz.)	7	7	7	7	7	7	7	7	7	7	7	10	10	16	16	16	16
Belt circumference (inches)	No belts													...	...	...	...
Belt width (64ths of an inch)	No belts													...	...	...	...
WEIGHT																	
Net weight (lbs.)	150	168	257	280	224	295	298	348	244	326	337	389	437	566	602	602	652
Shipping weight (lbs.)																	

COMPRESSOR

Models of 9-cu. ft. capacity or less: Made by Frigidaire, 1,730 r.p.m., sealed, rotary, direct-driven compressor located below food compartment. No shaft seal.

Refrigerant, F-114. Lubricant, special Frigidaire.

Models larger than 9 cu. ft.: Compressor Model No. FH-336—twin cylinder, 575 r.p.m., 1¼-in. bore, $1\frac{7}{16}$-in. stroke.

Made by Frigidaire, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, special Frigidaire.

Refrigerant, Freon. Lubricant, special Frigidaire.

CABINET

Made by Frigidaire. Frameless (except models larger than 9 cu. ft.). Special Frigidaire insulation, Panelyte breaker strip, soft rubber, balloon-type gasket.

HARDWARE

Made by Ternstedt. Chromium-plated finish.

MOTOR

Split-phase type (except models larger than 9 cu. ft., repulsion-induction type) made by Delco. Permanently oiled.

CONDENSER

Models larger than 6-cu. ft. capacity—Frigidaire fan-cooled finned-radiator type condenser.

Models of 6-cu. ft. capacity and less—Frigidaire natural draft cooled plate-type condenser.

EVAPORATOR

Made by Frigidaire, brass plate type, brazed and silver soldered.

Restrictor refrigerant control, except models larger than 9 cu. ft. which use high side float. Anodized aluminum and rubber ice trays. Automatic tray release. Quickube tray. Rubber grids.

CONTROL

Frigidaire adjustable temperature control, mounted inside the cabinet, except Koldchest, D3-36, WP12-36, WP15-36, Premier, and Imperial which are outside. Semi-automatic defrosting. Vacation cycle on all but Koldchest and D3-36. Automatic reset overload protector on all except models larger than 9 cu. ft., which are manual.

POLICY

Guarantee on cabinet: One-year warranty.

Guarantee on system: Five-year protection plan.

Serviced by: Authorized Frigidaire outlets.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES

Built-in thermometer, portable utility shelf, and two hydrators on Super models, sliding shelves on Super and Master models, removable ice tray making space for freezing of desserts, roasts, bulk ice cream, etc.

*Premier and Imperial models will freeze 14-lb. block of ice additional or store approximately 100 ice cubes.

NORGE

Norge Division, Borg-Warner Corp., Detroit, Mich.

Model No.	Economy T-20-6	Economy S-31-6	Economy E-32-6	Economy E-42-6	Economy E-52-6	Economy E-62-6	Deluxe L-42-6	Deluxe L-52-6	Deluxe L-62-6	Deluxe L-72-6	Deluxe L-82-6	Deluxe P-42-6	Deluxe P-52-6	Deluxe P-62-6	Deluxe P-72-6	Deluxe P-82-6	Deluxe P-95-6	Deluxe P-112-6
Compressor Model No.	ACC400B																	
PRICE																		
Retail price, installed																		
Cabinet finish, exterior	Synthetic enamel*											Porcelain						
*Models T-20-6 and S-31-6 have exterior top of porcelain.																		
CABINET DIMENSIONS																		
Overall height (inches)	36	35¾	48	52⅜	55⅝	60⅛	52⅞	55⅜	57½	59½	62	52⅞	55⅜	57½	59½	62	60⅞	60⅞
Overall width (inches)	22¾	24	24¼	24¼	27	29⅛	27⅛	28	30	32⅛	35	27⅛	28	30	32⅛	35	40⅞	48⅝
Overall depth (inches)	19⅞	21⅝	20½	21⅜	23⅛	24	22¼	24¾	24¾	24¾	24¾	22¼	24¾	24¾	24¾	24¾	25¼	25¼
Inside height (inches)	15⅝	17⅛	21	25⅜	27⅜	31⅝	25⅜	27⅜	29½	31	32½	25⅜	27⅜	29½	31	32½	31½	31½
Inside width (inches)	19¼	20½	19½	19½	21	21⅞	19½	20⅜	22¼	24½	27⅜	19½	20⅜	22¼	24½	27⅜	33	40¾
Inside depth (inches)	14½	16⅞	14⅞	15¾	17	16⅝	15¾	17⅛	17⅛	17⅛	17	15¾	17⅛	17⅛	17⅛	17	17	17
Number of doors	1																2	2
STORAGE CAPACITY																		
Net food storage (cu. ft.)	2.00	3.10	3.25	4.25	5.25	6.25	4.25	5.22	6.22	7.25	8.25	4.25	5.22	6.22	7.25	8.25	9.53	11.17
Number of shelves	2	2	3	3	3	4	3	3	4	4	4	3	3	4	4	4	6	6
Total shelf area (sq. ft.)	5.25	7.00	8.05	8.50	10.23	13.05	8.46	10.01	12.62	13.36	15.56	8.46	10.01	12.62	13.36	15.56	19.51	23.11
Cabinet finish (interior)	Porcelain																	
INSULATION																		
Top (thickness in inches)																		
Sides																		
Back																		
Door																		
Bottom																		
ICE CUBES																		
Number of shallow trays	2				3	3	2	3	2	2	3	2	3	2	2	3	3	6
Number of deep trays	0								1	1	1	0	0	1				
Total number of cubes	36	42	42	42	63	63	48	72	96	96	120	48	72	96	96	120	120	192
Total weight of cubes (lbs.)	2¾	4½	4½	4½	6¾	6¾	4⅝	7¼	9¾	9¾	12⅜	4⅝	7¼	9¾	9¾	12⅜	12⅜	20¼
COMPRESSOR																		
Ice melting effect 24 hrs. (lbs.)																		
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/5	1/6	1/6	1/5	1/5	1/4	1/6	1/6	1/5	1/5	1/4	1/4	1/4
Compressor speed (r.p.m.)	550	550	550	550	550	550	625	550	625	625	625	550	550	625	625	700	800	800
Refrigerant in system (oz.)																		
Quantity of lubricant ( )																		
Belt circumference (inches)	33¼					31¼	33¼	33¼	31¼	31¼	34	33¼	33¼	31¼	31¼	34	31⅞	31⅞
Belt width (64ths of an inch)	26																	
WEIGHT																		
Net weight (lbs.)	210	220	225	250	270	325	315	315	340	370	410	325	325	355	385	450	470	540
Shipping weight (lbs.)																		

COMPRESSOR

Made by Norge, Model ACC400B in all cabinets, open, rotary, belt-driven compressor located below food compartment.

Refrigerant, sulphur dioxide. Shaft seal, bellows.

CABINET

Made by Norge. Wood frame with "Norge approved" insulation, wood breaker strip, live rubber gasket.

HARDWARE

Made by ————————. Brass with chrome-plated finish.

MOTOR

Condenser-start type, made by ————————. Oil twice yearly.

CONDENSER

Made by ————————, fan cooled, finned tube condenser.

EVAPORATOR

Made by Norge, copper shell and tube evaporator. Low side float refrigerant control. Aluminum ice trays. One rubber tray in all Deluxe models.

SPECIAL FEATURES

All models: Defrost tray; electric light and Hydrovoir (except T-20-6, S-31-6, and E-32-6. Light available at extra charge on S-31-6 and E-32-6.)

Deluxe models: Bottle rack (except P-95-6 and P-112-6), dairy rack (except 42-6, 52-6, 95-6, and 112-6), adjustable shelf (except 42-6, 95-6, and 112-6), and sliding utility basket.

CONTROL

Made by ———————— adjustable temperature control, Model No. ————————, mounted inside cabinet. Wide-cycle defrosting with vacation cycle. ———————— overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Motor, check valve, fan, fan belt, pulleys, receiver, condenser, and freezer needle valve, five years; Rollator compressor, 10 years.

Serviced by: Distributors and dealers.

Replacement parts are not sold to independent service companies.

SMASHING THROUGH
TO GREATEST GAINS IN HISTORY!

ALREADY, 1936 CARLOAD ORDERS FOR FRIGIDAIRE ARE MORE THAN DOUBLE THOSE FOR ANY SIMILAR PERIOD!

● The sensational New Frigidaire with the Meter-Miser and the "Buy on Proof" program are breaking sales records for dealers everywhere. Never before has America given such a tremendous welcome to any refrigerator. Families by the thousands are buying on Proof! They're choosing the New Frigidaire with the Meter-Miser because it meets All Five Standards for Refrigerator Buying — with Proof. . . . 1. Proof of Lower Operating Cost. 2. Proof of Safer Food Protection. 3. Proof of Faster Freezing — More Ice. 4. Proof of More Usability. 5. Proof of Five-Year Protection Plan. . . . Dealers are amazed at the power of this unbeatable combination — an outstanding new product and the most forceful, workable sales and advertising program they've ever known. It's a combination that is gathering irresistible momentum with each passing day. . . . The Big Push is on! And Frigidaire selling men are definitely on their way to the most sensational success in the history of the business.

FRIGIDAIRE
MADE ONLY BY GENERAL MOTORS

FRIGIDAIRE CORPORATION • DAYTON, OHIO

CROSLEY

Crosley Radio Corp., Cincinnati, Ohio.

Model No.	GKT43	GKT50	GKT60	GKT70	GAT43	GAT50	GAT60	GAT70	GKQ43	GKQ50	GKQ60	GKQ70
Compressor Model No.	T1	T1	T1	T2	T1	T1	T1	T2	Q3	Q3	Q3	Q3
PRICE												
Retail price, installed	$149.95	$179.95	$194.95	$214.95	$134.95	$159.95	$174.95	$194.95	$134.95	$159.95	$174.95	$194.95
Cabinet finish, exterior	Dulux											
CABINET DIMENSIONS												
Overall height (inches)	56⅜	56½	58⅝	58⅞	56⅜	56½	58⅝	58⅞	56⅜	56½	58⅝	58⅞
Overall width (inches)	23⅞	27½	29⅞	33¼	23⅞	27½	29⅞	33¼	23⅞	27½	29⅞	33¼
Overall depth (inches)	24⅜	24⅜	26⅝	26⅞	24⅜	24⅜	26⅝	26⅞	24⅜	24⅜	26⅝	26⅞
Inside height (inches)	28½	28½	28¾	30⅛	28½	28½	28¾	30⅛	28½	28½	28¾	30⅛
Inside width (inches)	17⅜	20	22⅝	25	17⅜	20	22⅝	25	17⅜	20	22⅝	25
Inside depth (inches)	16¼	16¼	17⅞	17⅝	16¼	16¼	17⅞	17⅝	16¼	16¼	17⅞	17⅝
Number of doors	1	1	1	1	1	1	1	1	1	1	1	1
STORAGE CAPACITY												
Net food storage (cu. ft.)	4.33	5.07	6.01	7.00	4.33	5.07	6.01	7.00	4.33	5.07	6.01	7.00
Number of shelves	4	5	4	4	4	5	4	4	4	5	4	4
Total shelf area (sq. ft.)	9.07	12.34	14.37	15.68	9.07	12.34	14.37	15.68	9.07	12.34	14.37	15.68
Cabinet finish (interior)	Porcelain											
INSULATION												
Top (thickness in inches)	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾
Sides	2⅞	3⅜	3⅜	3¾	2⅞	3⅜	3⅜	3¾	2⅞	3⅜	3⅜	3¾
Back	3½	3½	3⅞	4	3½	3½	3⅞	4	3½	3½	3⅞	4
Door	1⅞	2	2⅜	3	1⅞	2	2⅜	3	1⅞	2	2⅜	3
Bottom	3½	3½	3½	3⅝	3½	3½	3½	3⅝	3½	3½	3⅝	3⅝
ICE CUBES												
Number of shallow trays	2	3	6	6	2	3	6	6	2	3	6	6
Number of deep trays	1	1	1	1	1	1	1	1	1	1	1	1
Total number of cubes	84	105	168	168	84	105	168	168	84	105	168	168
Total weight of cubes (lbs.)	5.2	6.5	10.4	10.4	5.2	6.5	10.4	10.4	5.2	6.5	10.4	10.4
COMPRESSOR												
Ice melting effect 24 hrs. (lbs.)	125	125	125	145	125	125	125	145	110	110	110	110
Motor horsepower	1/8	1/8	1/8	.15	1/8	1/8	1/8	.15	1/6	1/6	1/6	1/6
Refrigerant in system (oz.)	28 to 38											
Quantity of lubricant (oz.)	15 to 25											
Belt circumference (inches)	No belt								29	29	29	29
Belt width (64ths of an inch)	No belt								32	32	32	32
WEIGHT												
Net weight (lbs.)												
Shipping weight (lbs.)	334	362	407	446	319	344	397	428	345	371	420	460

Model No.	GAQ30	GAQ35	GAQ43	GAQ50	GAQ60	GAQ70	PGKQ50	PGKQ60	PGKQ70	PGKT50	PGKT60	PGKT70
Compressor Model No.	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3	Q3	T1	T1	T2
PRICE												
Retail price, installed	$ 99.50	$104.50	$124.95	$142.95	$154.95	$174.95	$181.45	$199.95	$224.95	$202.45	$219.95	$244.95
Cabinet finish, exterior	Dulux						Porcelain					
CABINET DIMENSIONS												
Overall height (inches)	36	50⅜	56⅜	56½	58⅝	58⅞	56½	58⅝	58⅞	56½	58⅝	58⅞
Overall width (inches)	23⅝	23½	23⅞	27½	29⅞	33¼	27½	29⅞	33¼	27½	29⅞	33¼
Overall depth (inches)	25	25½	24⅜	24⅜	26⅝	26⅞	24⅜	26⅝	26⅞	24⅜	26⅝	26⅞
Inside height (inches)	17	23	28½	28½	28¾	30⅛	28½	28¾	30⅛	28½	28¾	30⅛
Inside width (inches)	19⅛	17⅜	17⅜	20	22⅝	25	20	22⅝	25	20	22⅝	25
Inside depth (inches)	17¼	16¼	16¼	16¼	17⅞	17⅝	16¼	17⅞	17⅝	16¼	17⅞	17⅝
Number of doors	1	1	1	1	1	1	1	1	1	1	1	1
STORAGE CAPACITY												
Net food storage (cu. ft.)	3.00	3.50	4.33	5.07	6.01	7.00	5.07	6.01	7.00	5.07	6.01	7.00
Number of shelves	3	3	4	5	4	4	5	4	4	5	4	4
Total shelf area (sq. ft.)	6.92	7.44	9.07	12.34	14.37	15.68	12.34	14.37	15.68	12.34	14.37	15.68
Cabinet finish (interior)	Porcelain											
INSULATION												
Top (thickness in inches)	2	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾	2¾
Sides	2⅛	2⅞	2⅞	3⅜	3⅜	3¾	3⅜	3⅜	3¾	3⅜	3⅜	3¾
Back	1⅞	2¼	3½	3½	3⅞	4	3½	3⅞	4	3½	3⅞	4
Door	1⅜	1⅝	1⅞	2	2⅜	3	2	2⅜	3	2	2⅜	3
Bottom	2⅝	2⅞	3½	3½	3½	3⅝	3½	3⅝	3⅝	3½	3⅝	3⅝
ICE CUBES												
Number of shallow trays	2	3	2	3	6	6	3	6	6	3	6	6
Number of deep trays	0	0	1	1	1	1	1	1	1	1	1	1
Total number of cubes	42	63	84	105	168	168	105	168	168	105	168	168
Total weight of cubes (lbs.)	2.6	3.9	5.2	6.5	10.4	10.4	6.5	10.4	10.4	6.5	10.4	10.4
COMPRESSOR												
Ice melting effect 24 hrs. (lbs.)	110	110	110	110	110	110	110	110	110	125	125	145
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/8	1/8	.15
Refrigerant in system (oz.)	28 to 38											
Quantity of lubricant (oz.)	15 to 25											
Belt circumference (inches)	29	29	29	29	29	29	29	29	29	No belt		
Belt width (64ths of an inch)	32	32	32	32	32	32	32	32	32	No belt		
WEIGHT												
Net weight (lbs.)												
Shipping weight (lbs.)	250	296	330	353	410	442						

COMPRESSOR

Compressor Models T1 and T2—made by Crosley, sealed, reciprocating (horizontal piston, "Scotch-yoke" type), direct-driven compressor located above food compartment, single cylinder, 1730 r.p.m., 1⅛-in. bore, $^{21}/_{32}$-in. stroke (model T2, $^{9}/_{16}$-in. stroke).

Compressor Model No. Q3—made by Crosley, open, reciprocating, belt-driven, located above food compartment (except in model GAQ30), single cylinder, 525 r.p.m., 1½-in. bore, 1⅜-in. stroke.

Refrigerant, SO_2 in Q3, F-21 in T1, F-12 in T2. Lubricant, Suniso, Gulf, and Socony Vacuum. Shaft seal, diaphragm.

CABINET

Made by Crosley. Wood and steel frame with Balsam Wool and Thermocraft insulation, maple breaker strip, rubber moulded gasket.

HARDWARE

Made by Winters & Crampton (Crosley design) of stamped brass with chromium-plated finish.

MOTOR

Split-phase and capacitor-start type made by Delco. Oil every six months. (Sealed units permanently oiled).

CONDENSER

Made by McCord, Bush, and Heat Transfer, fan and natural draft cooled, finned tube condenser.

EVAPORATOR

Made by Crosley of corrugated sheet steel.

Capillary tube refrigerant control.

Aluminum ice trays with tray breaker.

CONTROL

Tagliabue (Model F) and Ranco adjustable temperature controls mounted inside and outside the cabinet. Manual defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Five-year protection plan.

Serviced by: Manufacturers, distributors, and dealers.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES

On all models: Shelvador, touch-open door handle, ventilated front, glass jar set, removable bar-type shelves, removable unit, and automatic interior light (except GAQ-30).

On Deluxe models only: Hydrator and Storadrawer.

UNIVERSAL COOLER

Universal Cooler Corp., Detroit, Mich.

Model No.	UC-4 Plus	UC-6 Plus	UC-8 Plus
Compressor Model No.	B	B	D
PRICE	No list or recommended		
Retail price, installed	retail prices		
Cabinet finish, exterior	Dulux		
CABINET DIMENSIONS			
Overall height (inches)	53¼	58¾	67
Overall width (inches)	23⅝	30¼	30¼
Overall depth (inches)	22¼	23½	23½
Inside height (inches)	26⅜	29⅜	37⅝
Inside width (inches)	18⅜	23⅝	23⅝
Inside depth (inches)	17	17	17
Number of doors	1	1	1
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.3	6.31	8.07
Number of shelves	3	4	6
Total shelf area (sq. ft.)	8.26	13.0	15.4
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	3⅝	3⅝	3⅝
Sides	2½	3⅛	3⅛
Back	2⅝	3⅛	3⅛
Door	2½	3¼	3½
Bottom	2⅝	3⅛	3⅝
ICE CUBES			
Number of shallow trays	3	4	6
Number of deep trays	0	0	1
Total number of cubes	54	84	140
Total weight of cubes (lbs.)	3.3	6.0	10.0
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	98	98	139
Motor horsepower	1/6	1/6	1/5
Refrigerant in system (lbs.)	1½	1½	1½
Quantity of lubricant (pts.)	⅔	⅔	1½
Belt circumference (inches)	33.8	33.8	33.8
Belt width (64ths of an inch)	37	37	37
WEIGHT			
Net weight (lbs.)	213	253	312
Shipping weight (lbs.)			

COMPRESSOR

Made by Universal Cooler, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. B—single cylinder, 400 r.p.m., 1½-in. bore, 1¼-in. stroke.

Compressor Model No. D—twin cylinder, 400 r.p.m., 1½-in. bore, 1¼-in. stroke.

Refrigerant, methyl chloride. Lubricant Suniso No. 4. Shaft seal, sylphon.

CABINET

Made by Leonard Refrigerator Co. Wood frame with Thermocraft insulation, bakelite breaker strip, black odorless rubber gasket.

HARDWARE

Made by ——— with chromium-satin finish.

MOTOR

Condenser-start type made by Wagner. Oil every 6 months.

CONDENSER

Universal Cooler fan cooled, finned copper tube condenser.

EVAPORATOR

Made by Universal Cooler, copper coil soldered to sleeves.

Detroit Lubricator expansion valve refrigerant control.

Aluminum ice trays. Cocktail and rubber trays in "6 plus" and "8 plus."

CONTROL

Ranco adjustable temperature control, mounted inside the cabinet. Model KW. Wide-cycle defrosting. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year.

Serviced by: Dealers.

Replacement parts are sold to independent service men.

SPECIAL FEATURES

Down-draft "double" cooling by means of increased evaporator surface.

TYPE KR—
12 MODELS
RANCOSTAT
—the
Stainless
Steel
Thermostat

We didn't forget the Service Man when we designed the Rancostat. No thermostat replacement could be simpler. Pull out the old one - - - slip a Rancostat in its place and the job is done with the least possible disturbance to your customer.

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COILS AND
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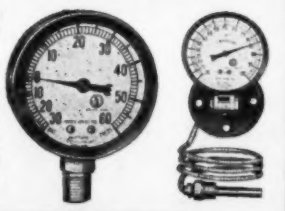
MARSH ZERO ADJUSTMENT (patent pending) assures perfect accuracy at every reading of the instrument.

Any instrument fitted with this construction can be calibrated on the job by the service man, in the plant, laboratory or instrument department within a very few minutes without the necessity of dissecting the instrument or gaining access to the interior mechanism.

Manufactured in front zero adjustment as illustrated for stationary service or back zero adjustment for portable service.



Jas. P. Marsh Corporation
2067 SOUTHPORT AVE., CHICAGO, ILL.

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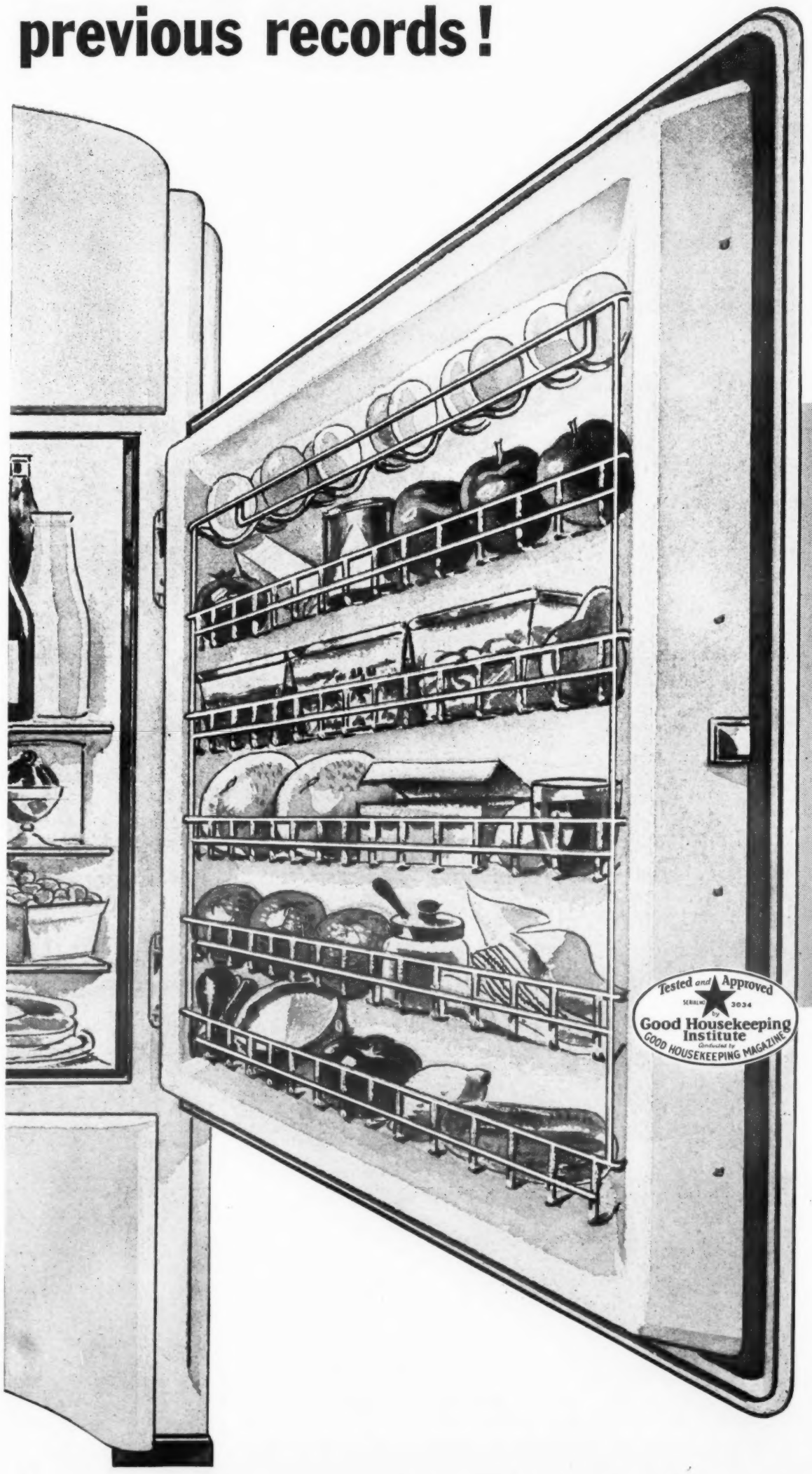
. . . over same period last year...and last year broke all previous records!



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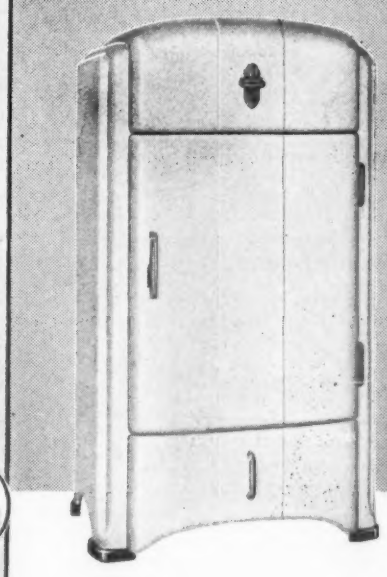
And dealers everywhere are snapping up the Crosley franchise—the greatest money-maker of the times.

this much more in a SHELVADOR



THE WORLD'S MOST BEAUTIFUL REFRIGERATOR

TO DEALERS, this brief suggestion—backed by PROOF: "The sooner you handle Crosley, the more you profit!"

Priced from $99.50 to $244.95, including delivery, installation. Five-Year Protection Plan.

(All prices slightly higher in Florida, Texas, Rocky Mountain States and West.)

THE CROSLEY RADIO CORPORATION, CINCINNATI - POWEL CROSLEY, Jr., President

GILMER V-Belts

QUIET
V-Belts for

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Oil Burners
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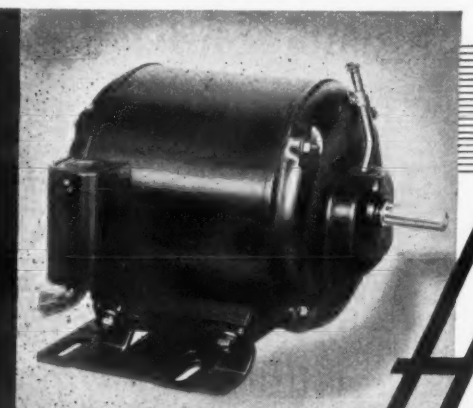
1936 CATALOG *is now ready*

FRACTIONAL horsepower belts in the three standard F. H. P. cross sections... 3/8", 1/2" and 21/32". The new catalog contains Gilmer sizes on complete listings. Write for yours today.

Gilmer BELTS

L. H. GILMER CO., Tacony, Phila.

MAKERS OF THE WORLD'S BEST-KNOWN V-BELTS



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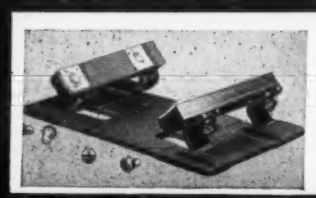
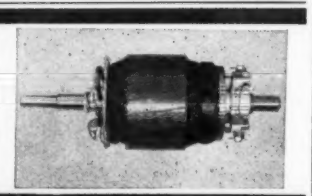


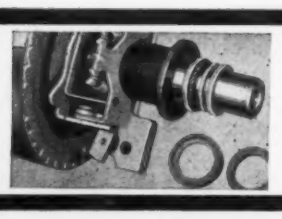


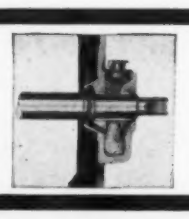
WAGNER MOTORS ARE QUIET

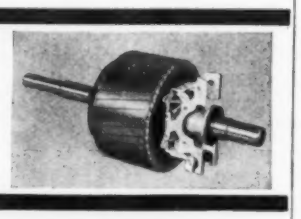
Wagner fractional-horsepower motors are quieter because:

1. Rotors are dynamically balanced to eliminate vibration and noise arising therefrom.
2. Cork thrust washers located at both ends of the motor cushion the free end movement of the rotor.
3. Steel-backed babbitt-lined bearings are accurately machined to secure bearing clearances small enough to avoid any possibility of excessive play and at the same time have ample clearance to afford a liberal oil film between shaft and the bearings.
4. Large oil wells filled with wool yarn furnish an uninterrupted supply of filtered oil to all parts of the bearing.
5. The number and the dimensions of rotor and stator slots are carefully chosen to minimize magnetic noise.
6. Steel laminations constituting the magnetic circuit are assembled firmly and compactly, thus avoiding the possibility of noise originating from loose laminations.
7. Coils are securely held in slots to prevent vibration; and the portion of winding not embedded in iron is held in a compact mass by thorough varnishing and baking treatment.
8. All switch parts are cushioned with shock-absorbing materials to prevent clicking noises.
9. On repulsion-start-induction motors, of the KA and RA types, the brushes do not touch the commutator at operating speeds, thus preventing brush noise.
10. Resilient mounting, interposed between motor frame and base, is made up of layers of rubber and steel vulcanized together — is elastic enough to absorb the small amount of vibration remaining even in the most carefully designed motor.

There are many other features of Wagner small motors, contributing not only toward quiet operation, but toward such essentials as dependability, performance, simplicity, and appearance. These features are fully described in Wagner Small Motor Bulletin 177, which will be sent upon request.







Wagner Electric Corporation
6400 Plymouth Avenue, Saint Louis, U.S.A.

MOTORS TRANSFORMERS FANS BRAKES

MS336-1M

WESTINGHOUSE

Westinghouse Electric & Mfg. Co., Mansfield, Ohio.

Model No. / Compressor Model No.	ED-30 ES-3	ED-40 ES-4	ED-50 ES-5	*ED-60 ES-6	*ED-70 ES-7	EDX-44 E-122	EDX-54 E-122	*EDX-67 E-123	*EDX78 E-123	EDXF-95 EF-123
PRICE	Zone 1 prices									
Retail price, installed	$109.50	$134.50	$169.50	$194.50	$224.50	$169.50	$194.50	$239.50	$264.50	$294.50
Cabinet finish, exterior	Dulux									
CABINET DIMENSIONS										
Overall height (inches)	46¼	51¾	54⅞	57½	60⅛	56⅝	58⅛	61	61⅜	66⅜
Overall width (inches)	24	24	27⅛	28⅝	29⅝	23¾	26½	28⅛	31⅜	33
Overall depth (inches)	24¾	24¾	25½	26½	26½	26¼	26¼	27	27	28⅛
Inside height (inches)	22⅛	28	31	33⅜	36	29¾	31¼	34⅛	34½	38½
Inside width (inches)	18¼	18¼	20¼	21¾	23¼	17⅞	20⅝	21¾	25	25⅝
Inside depth (inches)	14½	14½	14¾	15¼	15¼	15¼	15¼	16	16	17⅛
Number of doors	1									
STORAGE CAPACITY										
Net food storage (cu. ft.)	3.2	4	5	6	7	4.4	5.4	6.7	7.8	9.5
Number of shelves	2	2	2	3	4	3	3	3	3	4
Total shelf area (sq. ft.)	5.6	7.4	9.6	10.8	14.6	9.0	10.2	11.1	12.3	15.9
Cabinet finish (interior)	Porcelain									
INSULATION										
Top (thickness in inches)	2⅝	2⅝	2⅞	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
Sides	2⅞	2⅞	3⅜	3⅜	3⅜	2⅞	2⅞	3⅛	3⅛	3⅝
Back	2⅞	2⅞	2⅞	3⅜	3⅜	3¼	3¼	3⅛	3⅛	3⅝
Door	2⅝	2⅝	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
Bottom	3¾	3¾	4⅛	4⅛	3⅝	3⅛	3⅛	3⅛	3⅛	3⅛
ICE CUBES										
Number of shallow trays	2	2	3	5	5	3	3	5	5	5
Number of deep trays	0									
Total number of cubes	44	44	74	118	118	74	74	118	118	118
Total weight of cubes (lbs.)	4½	4½	7½	12	12	7½	7½	12	12	12
COMPRESSOR										
Ice melting effect 24 hrs. (lbs.)										
Motor horsepower	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/8	1/6
Refrigerant in system (oz.)										
Quantity of lubricant (oz.)										
Belt circumference (inches)	No belts									
Belt width (64ths of an inch)	No belts									
WEIGHT										
Net weight (lbs.)	228	244	288	337	355	316	339	383	415	460
Shipping weight (lbs.)										

Model No. / Compressor Model No.	E-50	*E-60	EPX-44 E-122	EPX-54 E-122	*EPX-67 E-123	*EPX-78 E-123	EPXF-95 EF-123	DCD-20	DCP-20	EPX-135	EPX-200
PRICE	Zone 1 prices										
Retail price, installed	$149.50	$169.50	$189.50	$229.50	$279.50	$309.50	$344.50	$ 84.50	$ 89.50	$484.50	$594.50
Cabinet finish, exterior	Dulux		Porcelain					Dulux	Porcelain		
CABINET DIMENSIONS											
Overall height (inches)	....	....	56⅝	58⅛	61	61⅜	66⅜	36	36	61¼	77¼
Overall width (inches)	....	....	23¾	26½	28⅛	31⅜	33	22	22	48¾	48¾
Overall depth (inches)	....	....	26¼	26¼	27	27	28⅛	22¾	22¾	30½	30½
Inside height (inches)	....	....	29¾	31¼	34⅛	34½	38½	....	....	....	....
Inside width (inches)	....	....	17⅞	20⅝	21¾	25	25⅝	....	....	....	....
Inside depth (inches)	....	....	15¼	15¼	16	16	17⅛	....	....	....	....
Number of doors	1										
STORAGE CAPACITY											
Net food storage (cu. ft.)	5.2	6.0	4.4	5.4	6.7	7.8	9.5	2.1	2.1	13.5	20.1
Number of shelves	....	....	3	3	3	3	4	....	....	....	....
Total shelf area (sq. ft.)	....	....	9.0	10.2	11.1	12.3	15.9	2.7	2.7	24.8	37.7
Cabinet finish (interior)	Porcelain										
INSULATION											
Top (thickness in inches)	....	....	3⅛	3⅛	3⅛	3⅛	3⅛	....	....	....	....
Sides	....	....	2⅞	2⅞	3⅛	3⅛	3⅝	....	....	....	....
Back	....	....	3¼	3¼	3⅛	3⅛	3⅝	....	....	....	....
Door	....	....	3⅛	3⅛	3⅛	3⅛	3⅛	....	....	....	....
Bottom	....	....	3⅛	3⅛	3⅛	3⅛	3⅛	....	....	....	....
ICE CUBES											
Number of shallow trays	....	....	3	3	5	5	5	....	....	....	....
Number of deep trays	0									1	1
Total number of cubes	....	....	74	74	118	118	118	22	22	192	192
Total wt. of cubes (lbs.)	....	....	7½	7½	12	12	12	2¼	2¼	21	21
COMPRESSOR											
Ice melting effect 24 hrs.											
Motor horsepower	1/8	1/8	1/8	1/8	1/8	1/8	1/6	1/8	1/8	1/4	1/4
Refrigerant in system											
Quantity of lubricant											
Belt circumference	No belts										
Belt width (64ths)	No belts										
WEIGHT											
Net weight (lbs.)	305	339	356	381	428	465	520	185	....	611	760
Shipping weight (lbs.)											

*Available with Freon compressor at $5.00 additional charge.

COMPRESSOR

Made by Westinghouse, sealed, reciprocating, direct-driven compressor located above food compartment in EDX and EPX models, below on ED models, others not given.

All compressor models listed—single cylinder, 1750 r.p.m., 1-in. bore, ⅞-in. stroke.

Refrigerant, sulphur dioxide in all compressors except those designated "F," which use Freon. Lubricant, special brand.

No shaft seal.

CABINET

Made by Westinghouse. Steel frame with special insulation, Micarta breaker strip, balloon-type gasket.

HARDWARE

Made by Westinghouse. Chromium finish.

MOTOR

Induction type made by Westinghouse. Permanently oiled.

CONDENSER

Made by Westinghouse, fan cooled, fin and tube type condenser.

EVAPORATOR

Made by Westinghouse of Sanalloy pressed metal. Temperature refrigerant control. Aluminum ice trays. Eject-o-Cube trays.

CONTROL

Westinghouse adjustable temperature control, Model No. ....., mounted outside the cabinet. Wide-cycle defrosting with vacation cycle. Auto reset bimetal overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Five years.

Serviced by: ————————

Replacement parts are not sold to independent service companies.

Specifications Index

Apex 35
Challenger (Uniflow) 29
Childare (Potter) 33
Coldspot (Sears-Roebuck) 23
Copeland 23
Crosley 10
Dayton (Heinz & Munschauer) 17
Electro-Kold 35
Fairbanks-Morse 16
Federal 25
Frigidaire 8
Gaffers & Sattler 27
General Electric 6
Gibson 31
Gilfillan 28
Grunow 22
Hostess 26
Hotpoint 19
Ice-O-Matic 14
Kelvinator 6
Lectrik-Ice (Uniflow) 29
Leonard 14
Mayflower 18
Merchant & Evans 19
Norge 8
O'Keefe & Merritt 30
Potter 33
Sanitary 19
Sparton (Sparks-Withington) 22
Starr Freeze 25
Stewart-Warner 16
Trupar 30
Truscon 23
Universal Cooler 10
Universal (Landers, Frary & Clark) 31
Ward (Montgomery Ward) 33
Westinghouse 12
Zerozone 35

..but what ever they ***CALL*** *it*

HERE'S WHAT THEY *WANT*..

"The new Standard of Refrigerator Value"

When prospects talk "refrigerator value" with their friends some mean "operating economy" . . . some mean "performance" . . . others, "style," "convenience," "gadgets" — or what have you.

When they talk to YOU as a Westinghouse dealer, you've got what they want no matter what they call it. Style, convenience, operating economy, dependable performance, special features — all converge in THE NEW STANDARD OF REFRIGERATOR VALUE.

You flash it before their eyes in the Valugraph Chart — a visualized selling method that makes outside values, inside values, and concealed values apparent at a glance.

You prove it with actual cutaway views of Super-sealed insulation, welded all-steel cabinet construction, Sealed-in mechanism . . . with face-to-face working demonstrations of the improved Eject-o-Cube Ice Tray, Adjusto-shelf, Triple Food Saver Set, and others.

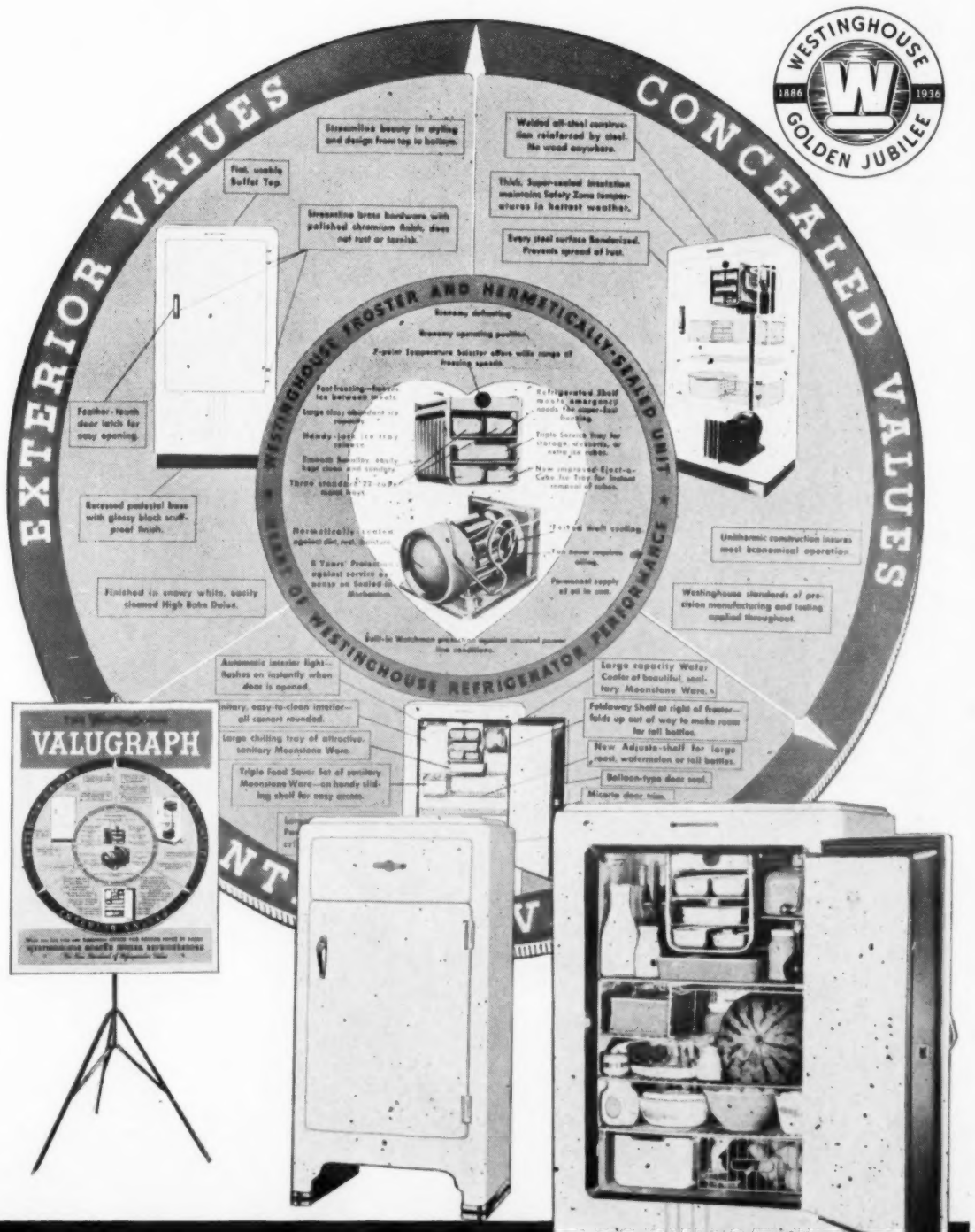
In their own homes they confirm the new standard of value through point by point comparison with the Valugraph Book and other material.

When they talk to users — there more than ever, they find evidence of Westinghouse values — values that last year gave Westinghouse the greatest percentage sales gain in the entire refrigerator industry.

If you're a Westinghouse dealer you've got the line that makes 1936 the greatest value year in refrigerator history. If you are NOT a Westinghouse dealer now is a good time to get all the facts about the Westinghouse Golden Jubilee Franchise.

ASK ABOUT THE NEW
Westinghouse
C·I·T· 6% BUDGET SAVINGS PLAN
It's ready now — a new financing plan that makes it easier than ever to own Westinghouse Refrigerators — and to sell them.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO.
Refrigeration Division
Mansfield, Ohio



Westinghouse *Golden Jubilee* **REFRIGERATORS**

T E M C O

Specializing in
ELECTRIC WATER COOLERS
priced accordingly

Nine Models
City Pressure and Bottle
with and without
Beverage Compartment

Write for prices

DOMESTIC and COMMERCIAL CONDENSING UNITS

from 1/6 H.P. to 15 H.P. — Air Cooled or Water Cooled
CH_3Cl or SO_2

A New Name — but backed by ten years experience in the manufacture of Electric Refrigeration Equipment.

Write for literature and prices

TEMCO ELECTRIC MFG. CO.
Bennington, Vermont, U.S.A.

SUCH LITTLE THINGS

This issue is to contain a mass of data giving manufacturer's specifications of the domestic units now ready for sale.

We venture to say that few tables of specifications will mention fittings, either by name or otherwise — "They are such little things".

It is true that fittings do not have the imposing appearance of a condensing unit, (**yet no condensing unit is any good without them**); they do not bulk as large in the eye as an evaporator, (**yet the evaporator also demands fittings or it too would fail**). Coils are quite imposing and are readily discernible; (**without fittings no coil is efficient**); so although fittings are little their function is great.

Fittings are our specialty. For more than a quarter of a century Commonwealth Fittings have been used on the best installations in the industry. Their work has always been so well done that it is now accepted as a matter of course that Commonwealth Fittings mean Seepage-Proof, Trouble-Free, Connections.

As always, we are at the service of the automatic refrigeration industry with a complete line of every type of dependable fittings.

BUILT RIGHT — TO STAY TIGHT
COMMONWEALTH BRASS CORP.
Commonwealth at Grand Trunk R.R.
DETROIT, MICH.

LEONARD

Leonard Refrigerator Co., Detroit, Mich.											
Model No.	LS5-36	LS6-36	L3-36	L4-36	L5-36	L6-36	L7-36	P5-36	P6-36	P7-36	P10-36
Compressor Model No.	SA	SA	SA	SA	SA	SA	SA	SA	SA	SA	B
PRICE											
Retail price, installed	$144.50	$164.50	$104.50	$129.50	$164.50	$189.50	$219.50	$184.50	$209.50	$249.50	$379.50
Cabinet finish, exterior	Dulux							Porcelain			
CABINET DIMENSIONS											
Overall height (inches)	54⅞	57⅝	45⅛	49⅞	55¾	57¾	62½	55¾	57¾	62½	64⅛
Overall width (inches)	27⅝	29⅛	24	24	29⅞	32⅛	32⅛	29⅞	32⅛	32⅛	40⅜
Overall depth (inches)	27¼	27¼	25¾	25¾	27½	27½	27½	27½	27½	27½	26⅛
Inside height (inches)	27⅜	30⅛	19½	24¼	25⅜	27⅜	32⅛	25⅜	27⅜	32⅛	34½
Inside width (inches)	20⅝	22⅛	18⅜	18⅜	22⅛	24¼	24¼	22⅛	24¼	24¼	32⅝
Inside depth (inches)	17	17	17	17	17	17	17	17	17	17	17⅞
Number of doors	1										2
STORAGE CAPACITY											
Net food storage (cu. ft.)	5.25	6.17	3.16	4.15	5.15	6.18	7.25	5.15	6.18	7.25	10.59
Number of shelves	5	4	5	5	5	5	6	5	5	6	6
Total shelf area (sq. ft.)	12.01	13.17	8.12	10.37	13.16	13.45	16.93	13.16	13.45	16.93	20.98
Cabinet finish (interior)	Porcelain										
INSULATION											
Top (thickness in inches)	3¼	3¼	2⅝	2⅝	3¼	3¼	3¼	3¼	3¼	3¼	3⅜
Sides	3¼	3¼	2½	2½	3¼	3¼	3¼	3¼	3¼	3¼	3¼
Back	3¼	3¼	2½	2½	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
Door	2½	2½	3⅛	3⅛	3⅜	3⅜	3⅜	3⅜	3⅜	3⅜	3
Bottom	3¼	3¼	2⅝	2⅝	3¼	3¼	3¼	3¼	3¼	3¼	3¼
ICE CUBES											
Number of shallow trays	3	3	2	2	3	3	4	3	3	4	4
Number of deep trays	0										1
Total number of cubes	63	81	32	40	72	72	96	75	75	99	147
Total wt. of cubes (lbs.)	6.75	10.5	4	4.5	10.5	10.5	14	10.5	10.5	14	20
COMPRESSOR											
Ice melting effect 24 hrs.	..	..	..	..	..	..	..	..	..	..	..
Motor horsepower	1/8						1/6	1/8	1/8	1/6	1/4
Refrigerant in system (oz.)	27	28	22	26	28	28	30	28	28	30	48
Quantity of lubricant (oz.)	15										24
Belt circumference (ins.)	31⅛										
Belt width (64ths of inch.)	26										38
WEIGHT											
Net weight (lbs.)	371	397	301	326	408	425	460	440	460	497	680
Shipping weight (lbs.)											

COMPRESSOR
Made by Leonard, open, reciprocating, belt-driven compressor located above food compartment, except on P10-36, which is below. Shaft seal, bellows.

Compressor Model No. SA—single cylinder, 560 r.p.m. (670 on models L7-36 and P7-36), 1¼-in. bore, 1-in. stroke.

Compressor Model No. B—twin cylinder, 410 r.p.m., 1¼-in. bore, 1-in. stroke.

Refrigerant, Freon (CCl_2F_2). Lubricant, Leonard oil.

CABINET
Made by Leonard. Steel and wood frame with Leonard insulation, composition bakelite breaker strip, balloon-type rubber gasket.

HARDWARE
Made by Leonard. Chrome-plated finish.

MOTOR
Condenser start-induction run type made by Emerson and Delco. Oil every 3 months.

CONDENSER
Leonard fan cooled, continuous fin and tube condenser.

EVAPORATOR
Made by Leonard of Armco iron, porcelain on steel. High side float refrigerant control. Anodic aluminum ice trays. Rubber grids in all trays (except models L3-36, LS5-36, and LS6-36).

CONTROL
Ranco adjustable temperature control, model KJ (KR on model P10-36), mounted inside the cabinet. Manual defrosting with vacation cycle. Current and temperature (Fusetron) overload protector.

POLICY
Guarantee on cabinet: One year.

Guarantee on system: One year warranty, plus four-year Protection Plan providing for free replacement of any necessary compressor mechanism.

Serviced by: Dealers only.

SPECIAL FEATURES
All models welded steel cabinet; bar-type shelves; rubber shelf supports; glass defrosting tray; vegetable drawers in models 5-36, 6-36, 7-36 (L and P); removable refrigerating unit; rearranging shelf on door; sliding shelves in models 5-36, 6-36, 7-36 (L and P).

ICE-O-MATIC

Williams Oil-O-Matic Heating Corp., Bloomington, Ill.

Model No.	D-3641	D-3651	D-3662	D-3682	P-3662	P-3682	AP-12	AP-15	AP-19
Compressor Model No.	TS-12	TS-12	T-16	T-16	T-16	T-16	T-25	B-33	B-33
PRICE									
Retail price, installed									
Cabinet finish, exterior	Dulux				Porcelain				
CABINET DIMENSIONS									
Overall height (inches)	52½	56¼	58½	63	58½	63	67⅞	70	72
Overall width (inches)	24⅜	26⅞	29	31⅞	29	31⅞	40	44	48
Overall depth (inches)	20¾	20¾	20¾	21¾	20¾	21¾	26	26	27¼
Inside height (inches)	26	29¾	31½	35½	31½	35½	34	36	38
Inside width (inches)	19	21	23⅝	25½	23⅝	25½	33½	37½	41½
Inside depth (inches)	16	16	16	16	16	16	19	20	21
Number of doors	1						2		
STORAGE CAPACITY									
Net food storage (cu. ft.)	4.60	5.80	6.92	8.40	6.92	8.40	12.5	15.6	19.2
Number of shelves	5	5	5	7	5	7	7	7	7
Total shelf area (sq. ft.)	10.25	11.45	13.3	18.9	13.3	18.9	28.5	33.3	38.6
Cabinet finish (interior)	Porcelain								
INSULATION									
Top (thickness in inches)	2½	2½	2½	3	2½	3	3	3	3
Sides	2½	2½	2½	3	2½	3	3	3	3
Back	2½	2½	2½	3	2½	3	3	3	3
Door	2¾	2¾	2¾	3¼	2¾	3¼	3¼	3	3
Bottom	2½	3	3	3½	3	3½	3½	3	3
ICE CUBES									
Number of shallow trays	3	3	4	5	4	5	4	4	5
Number of deep trays	0								
Total number of cubes	54	63	84	105	84	105	84	84	105
Total weight of cubes (lbs.)	3.75	6.41	8.54	10.68	8.54	10.68	11.2	11.2	16
COMPRESSOR									
Ice melting effect 24 hrs. (lbs.)	97	97	148	148	148	148	201	309	309
Motor horsepower	1/8	1/8	1/6	1/6	1/6	1/6	1/4	1/3	1/3
Refrigerant in system (oz.)	71	79	83	86	83	86	118	142	168
Quantity of lubricant (pts.)	2½	2½	2½	2½	2½	2½	2½	3	3
Belt circumference (inches)	35.7	35.7	42.6	42.6	42.6	42.6	42.6	52.1	52.1
Belt width	"A" Section								
WEIGHT									
Net weight (lbs.)	320	355	390	410	415	435	910	940	1000
Shipping weight (lbs.)									

COMPRESSOR
Made by Williams, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. TS-12—single cylinder, 400 r.p.m., 1-5/16-in. bore, 1-5/16-in. stroke.

Compressor Model No. T-16—twin cylinder, 300 r.p.m., 1-5/16-in. bore, 1-5/16-in. stroke.

Compressor Model No. T-25—twin cylinder, 410 r.p.m., 1-5/16-in. bore, 1-5/16-in. stroke.

Compressor Model No. B-33—twin cylinder, 355 r.p.m., 1½-in. bore, 1½-in. stroke.

Refrigerant, methyl chloride. Lubricant, Vacuum Oil No. S-1044. Shaft seal, steel rotating on bronze seat.

CABINET
Made by Williams and Midwest Stamping & Enameling Co.

Steel frame (wood on AP models) with Balsam Wool insulation, Tylac breaker strip, rubber gasket.

HARDWARE
Made by Winters & Crampton. Chromium-plated finish.

MOTOR
Capacitor start and run type, made by Williams.

Oil once a year.

CONDENSER
Made by Fedders (Bush on AP-15 and AP-19), fan cooled, finned tubing condenser.

EVAPORATOR
Made by Fedders of copper and brass, shell and tube evaporator. Float valve refrigerant control.

Aluminum and Flexotray ice trays.

CONTROL
Penn adjustable temperature control, type 201, mounted inside the cabinet. Wide-cycle defrosting. Hand reset bimetal overload protector.

POLICY
Guarantee on cabinet: One year.

Guarantee on system: One year.

Serviced by: Distributors and dealers.

Replacement parts are sold to independent service companies through regular distributors.

SPECIAL FEATURES
Flooded evaporators; full pressure lubrication on two-cylinder compressors; triple-action door latch; dome cabinet light, except in D-3641; food file, except in D-3641; glass left-over jars, except D-3641, D-3651, and D-3652; and vegetable freshener, except D-3641.

NORGE SETS THE PACE

WITH THIS ALLIED LINE OF Distinctive Home Appliances

A Norge dealer has an exceptional opportunity to build a sound, profitable business—to become a real factor in his community—to "Set the Pace" in home appliance sales.

To the Norge dealer a list of owners is a list of prospects. Every owner of a Norge refrigerator is a prospect—an opportunity for additional sales, additional profits. Every time the Norge dealer makes a sale he opens the door to another sale—and another—and another.

Norge home appliances are real "Pace-setters"—in styling, in desirable features, in sound construction, in advanced engineering features. Every one is a sound investment for the user—therefore a real business-builder for the dealer.

And Norge sets the pace in aggressive merchandising—in real selling support. Phenomenal growth through depression years is proof that Norge is able to engineer sales as well as products.

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NORGE DIVISION *Borg-Warner Corporation*
606-670 E. Woodbridge St., Detroit, Michigan

Norge originated 30 of the most important features in modern refrigeration.

THE ROLLATOR cold-making mechanism—introduced in 1926.

MODERN STYLING—introduced in 1932.

COMPLETELY SEALED ICE COMPARTMENT—introduced in 1926.

And 27 other outstanding features. Norge set the pace in the past. Norge sets the pace today. Norge will set the pace in the future.

NORGE CONCENTRATOR GAS RANGE...

distinguished in style and in exclusive features. Concentrator Burner has been pronounced the greatest advance in gas range engineering since the insulated oven. Broilator smokeless plate broiler can be easily demonstrated as a distinct improvement. Many models and combinations of available features make the Norge line easy to sell at a profit.

NORGE MATCHED LAUNDRY UNITS

Norge Autobuilt Washers and Norge Duotrol Ironers have unusual eye appeal and many desirable, easily demonstrated features. Washers are available with or without drain pump—gasoline or electric powered. The line includes five basic washer models and six ironers. Each has many exclusive convenience features.

NORGE

ROLLATOR REFRIGERATION (DOMESTIC AND COMMERCIAL)

GAS AND ELECTRIC RANGES

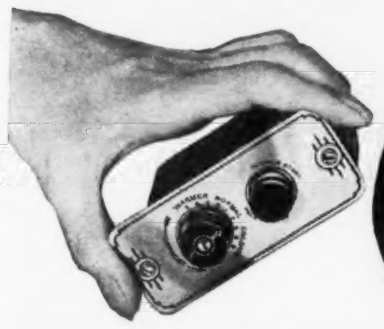
WASHERS AND IRONERS

WHIRLATOR OIL BURNERS

FINE-AIR FURNACES

AIR CONDITIONING

CIRCULATOR ROOM HEATERS



CUTLER-HAMMER REFRIGERATION CONTROL

For Replacement Service

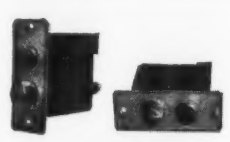
The dependable C-H Refrigerator Control is now available as a replacement unit. Same control used on popular-make Refrigerators . . . proved by time and service . . . manufactured by the Pioneer Control Company with 50 years of experience.

Easy to install, has the features which bring large-volume replacement business. Keep four models on hand and you are ready for 99% of all domestic calls. Each model mounts horizontally or vertically, fits large or small evaporator-shield openings. Simple connections get job done in a hurry.

NEW MODERN FEATURES. Differential adjustment screw gives whatever cut-in and cut-out temperatures or pressures are wanted; cold-control knob adjusts temperature or pressure range; defrost position; full overload protection to motor, resetting from self-indicating start-stop button. Handsome modern indicator plate in shiny chromium and black.

See your jobber at once. Send for complete new catalog describing this modern replacement control. Also replacement control for beverage coolers, ice cream cabinets and commercial service. Send for the catalog today. CUTLER-HAMMER, Inc., *Pioneer Manufacturers of Electric Control Apparatus*, 1362 St. Paul Avenue, Milwaukee, Wisconsin.

4 models meet 99% of all domestic calls. Temperature type in 24" and 48" tubes. Pressure type for sulphur dioxide and methyl chloride systems.



Mounts Horizontally or Vertically. Installs easily.

FOR BEVERAGE COOLERS AND ICE CREAM CABINETS

C-H Replacement Control for commercial use offers same big advantages as domestic controls. See catalog for full description.

CUTLER-HAMMER

REFRIGERATION CONTROL FOR REPLACEMENT SERVICE

DURALOY

Breaker Strips

ODORLESS . . . MOISTURE AND ACID RESISTANT, FABRICATED & PREFINISHED

HERMETEX

Insulation

.27 INSULATION VALUE . . . VERY INEXPENSIVE . . . WATERPROOF PACK . . .

CORRUGATED PAPER BOXES

PROMPT SERVICE AND DELIVERY ON ALL TYPES OF CONTAINERS

Write for Samples and Prices

DETROIT PAPER PRODUCTS CORP.,

5800 DOMINE ST., DETROIT, MICH.

HENRY FLARING TOOL

The flaring tool that is the fastest and easiest to operate! Sturdy and lasts longer. Adjustable cam lever locks the tube in place in carbonized clamping blocks. Greatest locking pressure is always exerted directly opposite the tube. For ¼", 5/16", ⅜", ½", and ⅝" tubing. Each, $4.55.

HENRY VALVE CO.

1001-19 N. Spaulding Ave., Chicago, Ill.

IF YOUR JOBBER CAN'T SUPPLY YOU, ORDER DIRECT

STEWART-WARNER

Stewart-Warner Corp., 1826 Diversey Parkway, Chicago, Ill.

Model No.	456	556	656	566	666	766	866	666P	766P	866P
Compressor Model No.	86100	86200	86200	86200	86200	86200	86200	86200	86200	86200
PRICE	Chicago prices									
Retail price, installed	$119.50	$159.50	$169.95	$179.50	$189.50	$204.50	$229.50	$209.50	$229.50	$259.50
Cabinet finish, exterior	Dulux							Porcelain		
CABINET DIMENSIONS										
Overall height (inches)	51½	54	57¾	54	57¾	61½	64⅜	57¾	61½	64⅜
Overall width (inches)	23⅞	28¾	28¾	28¾	28¾	31¼	31¼	28¾	31¼	31¼
Overall depth (inches)	21⅛	23	23	23⅞	23⅞	24⅞	24⅞	23⅞	24⅞	24⅞
Inside height (inches)	27⅜	28½	32¼	28⅛	32¼	35	37⅞	32¼	35	37⅞
Inside width (inches)	19½	22½	22½	22½	22½	24	24	22½	24	24
Inside depth (inches)	16	16¾	16¾	16¾	16¾	16¾	16¾	16¾	16¾	16¾
Number of doors	1									
STORAGE CAPACITY										
Net food storage (cu. ft.)	4.5	5.5	6.3	5.5	6.3	7.4	8.1	6.3	7.4	8.1
Number of shelves	5	6	8	6	8	8	7	8	8	7
Total shelf area (sq. ft.)	10.2	13.3	14.8	13.3	14.8	16.5	17.7	14.8	16.5	17.7
Cabinet finish (interior)	Porcelain									
INSULATION										
Top (thickness in inches)	2	3	3	3	3	3½	3½	3	3½	3½
Sides	2	3	3	3	3	3½	3½	3	3½	3½
Back	2	3	3	3	3	3½	3½	3	3½	3½
Door	2⅞	3	3	3	3	3½	3½	3	3½	3½
Bottom	2½	3	3	3	3	3½	3½	3	3½	3½
ICE CUBES										
Number of shallow trays	2	4	4	4	4	6	6	4	6	6
Number of deep trays	Optional									
Total number of cubes	56	96	96	93	93	141	141	93	141	141
Total weight of cubes (lbs.)	4	8	8	8	8	12	12	8	12	12
COMPRESSOR										
Ice melting effect 24 hrs. (lbs.)	93	155	155	155	155	155	155	155	155	155
Motor horsepower	1/6	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Refrigerant in system (oz.)	72	80	80	80	80	80	80	80	80	80
Quantity of lubricant (oz.)	20	24	24	24	24	24	24	24	24	24
Belt circumference (inches)	37	39⅝	39⅝	39⅝	39⅝	39⅝	39⅝	39⅝	39⅝	39⅝
Belt width (64ths of an inch)										
WEIGHT										
Net weight (lbs.)										
Shipping weight (lbs.)	299	393	411	421	444	503	517	464	529	545

COMPRESSOR

Made by Stewart-Warner, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. 86100—single cylinder, 450 r.p.m., 1½-in. bore, 1-7/16-in. stroke.

Compressor Model No. 86200—twin cylinder, 375 r.p.m., 1½-in. bore, 1-7/16-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, white oil (Socony Vacuum—80 to 90 vis). Shaft seal, Fulton bellows seal.

CABINET

Made by Stewart-Warner or Rex Mfg. Co. Wood and steel frame with Balsam Wool insulation, Tylac breaker strip, Miller rubber gasket.

HARDWARE

Made by S-W, Winters & Crampton, and Grand Rapids Brass with bright chromium finish.

MOTOR

Capacitor start motor made by Delco or General Electric. Oil once a year.

CONDENSER

Made by Bush Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR

Mullins Mfg. Co. (Stewart-Warner design), porcelain on pressed steel shell. Low side float refrigerant control, Stewart-Warner expansion valve. Anodized aluminum ice trays. Flexo-tray (rubber); double-depth tray (optional).

CONTROL

Cutler-Hammer adjustable temperature control. Model S-W No. 86399 and 86410 (C-H bulletin No. 9502), mounted inside the cabinet. Manual and wide-cycle defrosting. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year; then four-year optional replacement contract on specified major parts for $5.00 additional.

Serviced by: Distributors and dealers.

Replacement parts are sold to independent service companies, but usually through distributors.

SPECIAL FEATURES

Sav-a-Step, Slid-a-Tray, 11-point illuminated cold-control dial, Tilt-a-Shelf, and jumbo vegetable freshener and fruit basket.

FAIRBANKS-MORSE

Fairbanks-Morse & Co., Home Appliance Division, Indianapolis, Ind.

Model No.	C-4	C-5	C-6	C-6S	B-4	B-5	B-6	B-6S	B-8
Compressor Model No.	UC-1	UC-1	UC-1	UC-2	B-1	B-1	B-1	B-2	B-2
PRICE	F.O.B. Factory								
Retail price	$139.50	$169.50	$189.50	$199.50	$119.50	$149.50	$169.50	$179.50	$239.50
Cabinet finish, exterior	Dulux								
CABINET DIMENSIONS									
Overall height (inches)	51½	56	56½	56½	50⅝	55½	55½	55½	58½
Overall width (inches)	24⅛	25½	28¾	28¾	23¼	25⅝	28⅞	28⅞	34
Overall depth (inches)	23⅜	24¼	24⅞	24⅞	21¾	22⅝	23⅛	23⅛	23⅝
Inside height (inches)	24½	29⅛	29⅞	29⅞	24½	29⅛	29⅞	29⅞	32⅜
Inside width (inches)	18⅞	19⅞	22⅛	22⅛	18¾	19⅜	22	22	26⅝
Inside depth (inches)	17⅝	17⅝	17⅝	17⅝	17⅛	17⅛	17⅛	17⅛	17⅛
Number of doors	1								
STORAGE CAPACITY									
Net food storage (cu. ft.)	4.2	5.4	6.3	6.2	4.14	5.11	6.01	6.01	8.01
Number of shelves									
Total shelf area (sq. ft.)	9.25	10.55	12.55	12.26	9.25	10.55	12.55	12.26	15.76
Cabinet finish (interior)	Porcelain								
INSULATION									
Top (thickness in inches)	2½	3½	3½	3½	2	3	2¾	2¾	3¼
Sides	2¼	2½	3	3	2	2½	3	3	3¼
Back	2	2½	3	3	2	2½	3	3	3½
Door	3	3	3	3	3	3	3	3	3
Bottom	2	2½	3	3	2	2½	3	3	3½
ICE CUBES									
Number of shallow trays	2	3	3	4	2	1	1	2	2
Number of deep trays	0	0	0	0	0	1	1	1	1
Total number of cubes	42	63	63	84	42	63	63	84	84
Total weight of cubes (lbs.)	5	7½	7½	10	5	7½	7½	10	10
COMPRESSOR									
Ice melting effect 24 hrs. (lbs.)									
Motor horsepower	1/6	1/6	1/6	1/5	1/6	1/6	1/6	1/5	1/5
Refrigerant in system (oz.)	24								
Quantity of lubricant (oz.)	16	16	16	20	16	16	16	16	16
Belt circumference (inches)	33½								
Belt width (64ths of an inch)	32								
WEIGHT									
Net weight (lbs.)	325	355	385	395	300	337	363	370	419
Shipping weight (lbs.)									

COMPRESSOR

Made by Fairbanks-Morse, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. UC-1—single cylinder, 445 r.p.m., 1 7/16-in. bore, 1 7/16-in. stroke.

Compressor Model No. UC-2—twin cylinder, 445 r.p.m., 1 7/16-in. bore, 1 7/16-in. stroke.

Compressor Model No. B-1—single cylinder, 500 r.p.m., 1½-in. bore, 1 7/16-in. stroke.

Compressor Model No. B-2—twin cylinder, 350 r.p.m., 1½-in. bore, 1 7/16-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, Sunisco No. 2. Shaft seal, bellows.

CABINET

Made by Fairbanks-Morse. Maple frame with Balsam Wool insulation, Tylac breaker strip, rubber gasket.

HARDWARE

Made by National Lock Co. Chrome finish.

MOTOR

Capacitor type made by Fairbanks-Morse. Oil yearly.

CONDENSER

Made by Fedders, fan cooled, finned tube condenser.

EVAPORATOR

Made by Fedders, electro-tinned copper tube and sleeve. Thermostatic expansion valve refrigerant control, made by Detroit Lubricator. Alumilited aluminum ice trays. Refrigerated shelf. Ice tray release.

CONTROL

Cutler-Hammer adjustable temperature control, mounted inside the cabinet. Model No. ———————. Wide-cycle defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year, plus 4-year optional plan.

Serviced by: Dealer.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES

Conservador, touch-open door opener, interior light.

Retailers Study Rapid Growth of Instalment Sales in Dept. Stores; Fear Over Expansion of Credit

NEW YORK CITY—A $5,000,000,000 retail instalment sales volume in 1936 was visualized as a "reasonable expectation" by the credit management division of the National Retail Dry Goods Association in a statement made last week.

Percentage of merchandise sales on an instalment credit basis was viewed by J. Anton Hagios, manager of the division, as likely to equal and possibly exceed to some extent the high point in 1929, when 13%, or approximately $6,370,000,000 of the $49,000,000,000 in total retail sales, was made through instalment selling.

Should the ratio of instalment sales to total retail sales continue to increase during the next few years as an outgrowth of the present trend in instalment granting, an increasing outstanding instalment debt will be created, according to the credit management division, which may present a weighty problem to stores in the event of another business slump.

So important do retail credit executives consider this question that the division has organized a special committee to study the operating results of current department store instalment selling practices, and plans to bring their findings generally before the profession at the credit sessions of the semi-annual convention of N.R.D.G.A. in Chicago, June 8 to 12, it was reported. Ben S. Wright, credit manager, LaSalle & Koch Co., Toledo, is chairman of the committee.

Mr. Hagios traced the expansion in instalment selling during the last few years.

"In 1929 total retail sales were, roughly, $49,000,000,000, and fell 48% to $25,000,000,000 in 1932," he asserted. "The percentage of instalments to total retail sales in the latter year is not known, but it is safe to assume it was considerably smaller than the 13% ratio of 1929, as instalment sales showed a sharper decline than total sales in 1932, since instalment selling was then still largely confined to bulk and luxury merchandise."

With retail sales rebounding to a total of $32,500,000,000 last year, Mr. Hagios estimated that instalment selling accounted for 12%, or $3,840,000,000 of that amount. That instalment selling was making tremendous strides was evidenced by the figures of the Controllers' Congress "flash report" for 1935, which showed that in 1935 instalment sales increased 35% while total store sales had increased but 7% in that year. The extension of the instalment plan privilege to the sale of general merchandise in all likelihood had a considerable effect on the increase in store instalment sales, Mr. Hagois said.

"Unless the present trend toward selling all types of merchandise on the instalment plan is sharply reversed, the ratio of instalment sales to total sales will, in all probability, continue to increase from year to year," he declared. "This means we shall have a constantly increasing amount of instalment debt outstanding in addition to an already large existing consumer debt.

"If our total national income and reserves do not increase at an equal or higher rate than the outstanding national consumer debt, the margin between the two, or the degree of national liquidity, will become smaller.

"This raises the question of what will happen should we hit another slump in business? Will our national income, suddenly reduced by a radical change in economic conditions, plus the reserves in the form of savings, dividends, and annuities, be a sufficient cushion to withstand the shock of rapidly decreased business activity, or will the retail craft be left in a more precarious position than in 1929?

"It should be borne in mind that although stores for the most part successfully liquidated outstanding instalment indebtedness during the depression, at this time instalment credit is being made available in many cases to an entirely new class of buyers representing a sub-standard risk."

The answer, Mr. Hagios said, is purely academic because lack of information makes it impossible to even hint at the answer. However, he pointed out, retailers need a better understanding of all phases of instalment selling and its effect on retail business, its social and economic bearing on the consumer, and its effect on the whole national economy.

It is for this reason that the division has organized the special committee to study the problem and bring its findings before the credit profession.

The study will include the development of deferred-payment volume statistics indicating their extent throughout the nation, its relation to total store volume in the individual store organization, and a review of its growth over a period of years.

Specific information regarding many new instalment selling plans will be sought, including a thorough investigation of all phases of the problem which will aid in an evaluation of the soundness of the new types of instalment business.

DAYTON

Heinz & Munschauer Co., Buffalo, N. Y.

Model No.	4-S-2	5-S-2	6-S-4	6-D-3	7-D-4	8-D-4
Compressor Model No.	500A	500A	500A	500A	500A	500A
PRICE						
Retail price, installed						
Cabinet finish, exterior	Porcelac					
CABINET DIMENSIONS						
Overall height (inches)	49¼	55¾	55¾	56½	56½	56½
Overall width (inches)	23¼	24	28	28½	32⅛	35½
Overall depth (inches)	23	25	25	26½	26½	26½
Inside height (inches)	24	29½	29½	29½	29½	29½
Inside width (inches)	18¾	18½	22½	22½	25⅞	29¼
Inside depth (inches)	26¼	17	17	17	17	17
Number of doors	1					2
STORAGE CAPACITY						
Net food storage (cu. ft.)	4.02	5.02	6.04	6.04	7.05	8.05
Number of shelves	3	3	3	5	6	7
Total shelf area (sq. ft.)	8.2	9.5	11.3	12.83	15.08	15.83
Cabinet finish (interior)	Porcelain					
INSULATION						
Top (thickness in inches)	2½	3	3	3	3	3
Sides	2	2⅝	2⅝	3	3	3
Back	2	2⅝	2⅝	3	3	3
Door	2	2⅝	2⅝	3	3	3
Bottom	2	2⅝	2⅝	3	3	3
ICE CUBES						
Number of shallow trays	2	2	2	3	4	4
Number of deep trays	0	0	1	0	0	0
Total number of cubes	42	42	84	84	112	112
Total weight of cubes (lbs.)	5	5	6¾	7½	10	10
COMPRESSOR						
Ice melting effect 24 hrs.	100	100	100	100	100	133
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/4
Compressor speed (r.p.m.)	480	480	480	480	480	530
Refrigerant in system						
Quantity of lubricant						
Belt circumference (inches)	34	34	34	34	34	34
Belt width (64ths of inch)	34	34	34	34	34	34
WEIGHT						
Net weight (lbs.)	234	266	288	296	333	350
Shipping weight (lbs.)						

COMPRESSOR
Made by Tecumseh, open, reciprocating, belt-driven compressor located below food compartment.
Compressor Model No. 500A—single cylinder, 480 r.p.m., (530 on model 8-D-4), $1\frac{7}{16}$-in. bore, $1\frac{7}{16}$-in. stroke.
Refrigerant, sulphur dioxide. Lubricant, Suniso No. 3. Shaft seal, sylphon.

CABINET
Made by Heinz & Munschauer. Wood frame with Balsam Wool insulation, Bakelite (D models) and Masonite (S Models) breaker strip, Miller balloon type rubber gasket.

HARDWARE
Made by Grand Rapids Brass and Winters & Crampton. Chrome-plated brass.

MOTOR
Capacitor type made by Leland. Oil every four months.

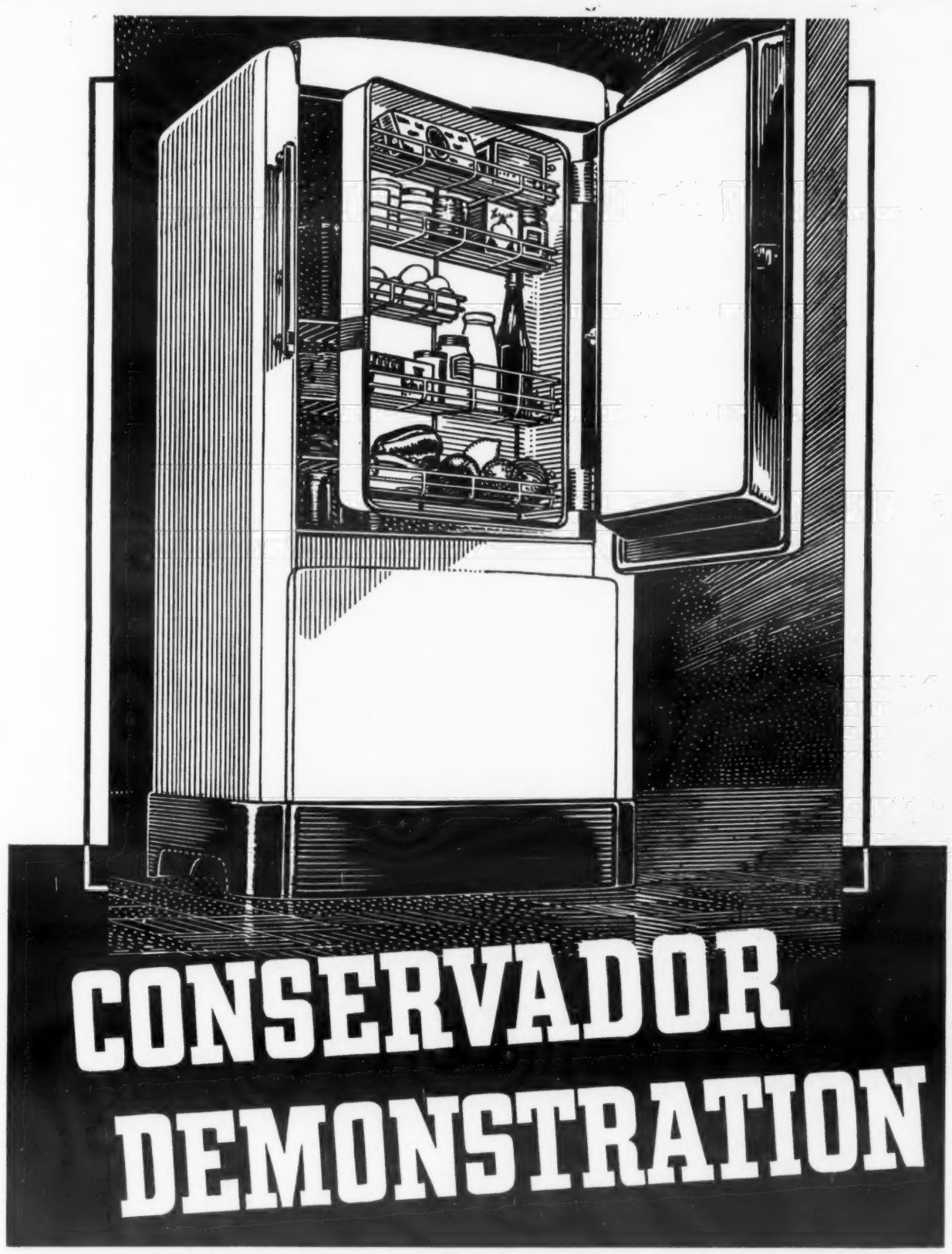
CONDENSER
Made by Fedders Mfg. Co., fan cooled, conventional fin-type condenser.

EVAPORATOR
Made by Mullins, porcelain on steel, and by Heinz & Munschauer, copper wrapped tubing on sleeve. Float refrigerant control on Mullins evaporator and Mayson and Heinz & Munschauer expansion valve on others.
Aluminum ice trays. One rubber tray on D models.

CONTROL
Ranco adjustable temperature control. Control type KRV and KRH, mounted inside the cabinet. Manual or semi-automatic defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: None.
Guarantee on system: One year warranty.
Serviced by: Distributor.
Replacement parts are sold to independent service companies.

SPECIAL FEATURES
All models—evaporator door. D models—vegetable freshener and door basket.



"closes more sales" SAY DEALERS

Webster's International Dictionary says that "demonstration" means "the act of giving tangible evidence of something specific."

And therein is the reason why dealers in Fairbanks-Morse Refrigerators are setting up new records in fast turnover for others to shoot at.

The Fairbanks-Morse Refrigerator is the only refrigerator which arms you, as a dealer, with a money-saving feature which can be demonstrated. This feature is the CONSERVADOR—a shelf-lined inner door behind the main door, for storing most frequently used foods.

You can talk about "economical operation" with an ordinary line of refrigerators. But what money-saving, time-saving feature is there about the ordinary job that you can demonstrate to Mr. and Mrs. Average Prospect?

With the Fairbanks-Morse you just open the main door of the Fairbanks-Morse and show the CONSERVADOR. That's all. Anybody can see how it serves to keep cold air from rushing out of the main food compartment when the main door is opened. No other refrigerator has this patented feature. And that's not all. The F-M Refrigerator has everything offered by any other refrigerator. Prospects quickly see that, too!

Conservador Refrigerator Machine Units are warranted for five years under an optional warranty purchase plan.

● GAMBLE 3 cents on the profit opportunity of the industry! Get the inside facts on the F-M franchise. Write or wire Fairbanks, Morse & Co., Home Appliance Division, 2060 Northwestern Ave., Indianapolis, Ind.

FAIRBANKS-MORSE
Refrigerators

Other Fairbanks-Morse Products: Washing Machines, Ironers, Radios, Automatic Coal Burners

Survey Among Furniture Stores On Refrigerators Shows Pricing, Sales, and Service Trends

CHICAGO—Interesting facts on furniture store merchandising of household electric refrigerators have been uncovered in a recent survey conducted among 144 furniture merchants by National Retail Furniture Association.

Covered in the survey were the types of selling forces merchandising refrigerators, time payment sales policies, trade-in practices, price of best-selling units, length of time-payment contracts, advertising methods, compensation of department managers and salesmen, and number of refrigerator lines handled.

Best selling units during 1935, the survey revealed, were those priced competitively with mail order house levels, the most popular level being $149.50, and the second most popular $159.50.

Survey highlights show that most dealers handle their own delivery, and seven out of 10 do their own servicing. Less than two-thirds, last year, carried their own refrigerator accounts. More than one-fourth of the stores have outside selling forces on electrical appliances—on in eight had a sales crew working on refrigerators only.

Eighty-eight per cent of the stores covered in the survey said they were going to push refrigerators hard in 1936; 50% said they were satisfied with their 1935 refrigerator sales results. Only 30%, however, were satisfied with the profits their refrigerator departments had shown.

Sixty per cent of the stores reporting said they sold from floor displays only, with the regular store sales force; 9% sold from floor display, with special salesmen handling refrigerator sales; 27% had an outside selling force on electrical appliances; 13% had a sales force on refrigerators alone.

One-third of the stores had an appliance department manager, who was in charge of refrigeration as well; 12% had their refrigeration departments under a special manager.

Most popular price level, the survey revealed, was in the $149.50 range. Thirty-four dealers gave this as their first choice and 25 ranked it second, a total of 59. Close behind, in popularity, was the $159.50 range, 58 dealers naming this as first or second choice.

Forty-seven dealers placed $169.50 in the one-two position; 46 favored $129.50, 41 preferred $119.50, and 37, $1.39.50. Thirty-four dealers ranked refrigerators in the $189.50 range as either best or second best seller.

Other one-two choices, with the number of dealers supporting them, were: $249.50 (28 dealers), $219.50 (28), $199.50 (27), and $179.50 (22). Only 13 dealers reporting ranked refrigerators in the $99.50 range as their best or second best selling models. Ten favored models selling for $250 or more.

As to time payment financing, 63% of the stores reported that they carried all their own accounts; 9% said they sold all of them. Eight per cent sold from 75 to 99% of their accounts; 5% sold from 50 to 74%; 4% sold 25 to 49%; and 11% sold less than 25%.

Trade-in statistics showed a wide variance, both on ice refrigerators and used mechanical ones. Eighty-seven per cent of the stores said they allowed trade-ins on ice refrigerators; the remaining 13% refused to handle them. Forty-two per cent allowed trade-ins on used electric refrigerators; but 53% favored abolishing this practice.

Of the 87% allowing trade-ins on old ice refrigerators, 45% allowed $5 per box; 30% allowed $10. Twenty per cent allowed from 5 to 10% of the value of the new refrigerator, and 5% had a flat rate allowance of $7.50.

Of the 42% allowing trade-ins on old mechanical units, 46% said they gave $25; 29% allowed $20; 15% allowed $35; and 10% allowed that percentage of the value of the new refrigerator.

Seventy-three per cent of the stores covered in the survey said they had a flat allowance rate for old ice refrigerators; only 11% had a similar rate for used mechanical units. The balance, in each case, based the allowance on appraised valuation. Forty-one per cent counted the trade-in allowance as down payment on the new refrigerator.

Besides the 53% who favored cutting out trade-ins on used electric refrigerators, a total of 60% were in favor of limiting this practice. Of this last group, 64% wanted the allowance based on an appraised valuation, 14% wanted it limited to $5, 8% to a maximum of 10% of the value of the new refrigerator, and 14% to 5% of the new refrigerator's worth.

A majority of the dealers favor the two year maximum time payment stretch, in both their own and manufacturer advertising. Here are the results on that question:

On manufacturer advertising, 51% favored limiting terms to 24 months; 24% favored 18 months, 16%, 12 months; 6%, 36 months; and 3%, 30 months. Dealer time payment advertising followed the same preference, with 52% favoring 24 months, 24% 18 months; 13%, 12 months; 7%, 36 months; and 4%, 30 months.

Asked what they featured during 1935 in refrigerator advertising, 34% reported "No Down Payment;" 35% said "15 Cents Per Day;" 31% said "Two Years to Pay;" 28% said "Three Years to Pay;" 10% said "25 Cents Per Day;" and 7%, "10 Cents Per Day."

Compensation of managers and salesmen, the survey revealed, was fairly well divided between salary, commission, and a combination of the two. Forty per cent of the stores reported they paid their department managers a straight salary; 30% paid a commission only; and another 30% paid salary and commission.

Outside salesmen ran lower on salary and higher on commission; inside salesmen's pay was rather evenly divided. Forty-seven per cent of the stores paid outside salesmen on commission only; 39% paid inside salesmen on this basis also. Only 14% of the outside salesmen were paid on salary, while 32% of the inside salesmen were paid on this basis.

Of the 144 stores reporting, a little more than half, or 78 stores, said they carried only one line of refrigerators. Thirty-one dealers said they carried two lines, 16 handled three lines, 10 handled four, five handled five, and four sold six competitive makes.

BEST SELLING PRICE LEVELS

Question: What price units sold best? FIRST? SECOND?

By Price Ranges		Stores Reporting (First)	(Second)
	$ 99.50	8	5
$100 to and including	119.50	31	10
120 to and including	129.50	28	18
130 to and including	139.50	21	16
140 to and including	149.50	34	25
150 to and including	159.50	29	29
160 to and including	169.50	21	26
170 to and including	179.50	12	10
180 to and including	189.50	15	19
190 to and including	199.50	11	16
200 to and including	219.50	13	15
220 to and including	249.50	10	19
250 and over		6	4

Kelvinator Salesmen in Alabama Go to School

BIRMINGHAM, Ala.—Inaugurating a series of weekly meeting for refrigerator and electrical appliance dealers and their salesmen, R. P. McDavid & Co., Kelvinator distributor for the state of Alabama, was host April 11 to 60 salesmen.

The meetings, according to R. P. McDavid, company president, are being held to school local Kelvinator dealers and their salesmen in up-to-the-minute selling methods.

As part of the program scheduled for the series, Mr. McDavid states, a printed list of questions relating to sales methods and problems will be handed out at each meeting. The salesman who makes the best average grade in answering the questions will be awarded a new suit of clothes, and runners up will receive a hat and shoes.

Speakers at the meeting, which was presided over by B. C. McCoy, sales manager, were D. S. Sutherland, sales manager of the Georgia Power Co., and Miss Susan Brandon, the power company home economist.

Electric Kitchen Features New Merriam Store

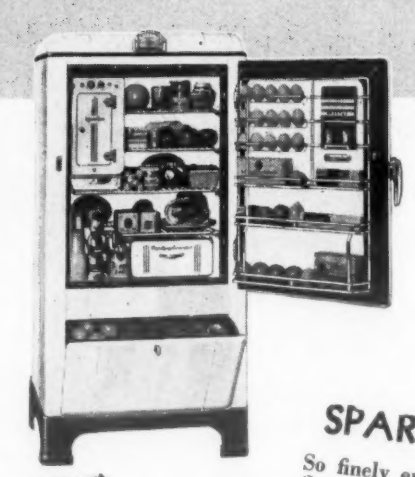
SCHENECTADY—A General Electric kitchen with every appliance operating highlights of the new appliance display room which was formally opened March 26, 27, and 28 by A. Wayne Merriam, G-E distributor

The kitchen is designed especially to show the possibilities of compact arrangement, convenience of cabinets and surfaces, and the cleanlines and beauty of porcelain tile wall surfaces.

Display facilities of the new store are available to the dealer at any time, according to Mr. Merriam.

IF IT'S *Profit* YOU WANT

LOOK HERE



1 SPARTON BASKADOR
Added storage capacity for eggs, bacon, butter, cheese and other small produce. A major selling advantage.

2 SPARTON VEGABIN
Space below the refrigerator compartment for storing bulky vegetables. Another major Sparton selling feature.

3 SPARTON ANTIFROST ECONOMY CLOCK
Makes the Sparton completely automatic. Saves money in electricity and food preservation. A highly important, exclusive Sparton selling feature.

4 SPARTON BASKADRAWER
A sliding wire container for miscellaneous foods. Another major Sparton selling feature.

5 SPARTON SILENT UNIT
So finely engineered is the unit of the new Sparton refrigerator that you can hardly hear it run. Demonstrate the silence of Sparton and you've piled up one more important selling advantage.

6 SPARTON FIVE-YEAR WARRANTY
To top all of Sparton's many features, this advanced refrigerator is guaranteed for 5 years.

All-feature Spartom *Refrigerator*

There's no other refrigerator on the market which has so many selling features as Sparton. That's why Sparton dealers make money. Their sales come easily and quickly. Once you run through the Sparton advantages with a prospect, she's completely sold and she knows that she can't get all these important features in any other refrigerator. The sale is yours and the profit is yours. Come into the Sparton family now. The Sparks-Withington Company, Jackson, Michigan. Sparton of Canada, Ltd., London, Ontario.

COLD AND SILENT AS A WINTER NIGHT

MAYFLOWER

Mayflower, Inc., Lima, Ohio.

Model No.	G46	G56	G66	G86	GP66	GP86
Compressor Model No.	TL-70	TL-70	TL-70	TL-140	TL-70	TL-140
PRICE						
Retail price, installed	Sold on factory net price basis only					
Cabinet finish, exterior	Dulux				Porcelain	
CABINET DIMENSIONS						
Overall height (inches)	52½	56¼	58½	63	58½	63
Overall width (inches)	24⅜	26¾	29	31⅞	29	31⅞
Overall depth (inches)	21½	21½	21½	22½	21½	22½
Inside height (inches)	26	29¾	31½	35½	31½	35½
Inside width (inches)	19	21	23⅝	25½	23⅝	25½
Inside depth (inches)	16	16	16	16	16	16
Number of doors	1					
STORAGE CAPACITY						
Net food storage (cu. ft.)	4.3	5.5	6.4	8.0	6.4	8.0
Number of shelves	4	4	4	4	4	4
Total shelf area (sq. ft.)	9.7	12.1	13.4	14.75	13.4	14.75
Cabinet finish (interior)	Porcelain					
INSULATION						
Top (thickness in inches)	2½	2½	2½	3	2½	3
Sides	2½	2½	2½	3	2½	3
Back	2½	2½	2½	3	2½	3
Door	2¾	2¾	2¾	3¼	2¾	3¼
Bottom	2½	2½	3	3½	3	3½
ICE CUBES						
Number of shallow trays	2	2	3	4	3	4
Number of deep trays	0					
Total number of cubes	56	56	84	112	84	112
Total weight of cubes (lbs.)	4¾	4¾	7¼	9½	7¼	9½
COMPRESSOR						
Ice melting effect 24 hrs.	110	110	110	158	110	158
Motor horsepower	1/6	1/6	1/6	1/4	1/6	1/4
Refrigerant in system (lbs.)	4, 4½, and 5					
Quantity of lubricant (oz.)	18	18	18	18	18	18
Belt circumference (inches)	32½					
Belt width (64ths of inch)	32					
WEIGHT						
Net weight (lbs.)	265	285	355	375	360	380
Shipping weight (lbs.)						

COMPRESSOR
Made by Tecumseh, open, reciprocating, belt-driven compressor located below food compartment.
Compressor No. TL-70—single cylinder, 530 r.p.m., 1 7/16-in. bore, 1 7/16-in. stroke.
Compressor No. TL-140—twin cylinder, 450 r.p.m., 1 7/16-in. bore, 1 7/16-in. stroke.
Refrigerant, sulphur dioxide. Lubricant, Suniso No. 2. Shaft seal, bellows.

CABINET
Made by Midwest Stamping & Enameling Co. Steel frame with Balsam Wool insulation, Tylac breaker strip, Miller rubber gasket.

HARDWARE
Made by Grand Rapids Brass. Chromium finish.

MOTOR
Capacitor-start induction-run type made by Leland. Oil annually.

CONDENSER
McCord, fan cooled, integral fin, single and double pass type condenser.

EVAPORATOR
Made by Mullins, porcelain on steel shell type. Low side float refrigerant control. Aluminum ice trays. One rubber tray in all models except G-46.

CONTROL
Ranco adjustable temperature control type KRSV, mounted inside the cabinet. Wide-cycle defrosting. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year standard warranty.
Guarantee on system: One year standard warranty.
Serviced by: Distributors and dealers.

SPECIAL FEATURES
Replacement parts are sold to independent service companies.

HOTPOINT

Hotpoint—General Electric Co.—Appliance & Merchandising Department, Cleveland, Ohio.

Model No.	AV-43	AV-52	AV-70	A-4	A-5	A-7	AP-5	AP-7	AP-12	AP-15	LK-1	LK-2
Compressor Model No.	CM-32	CM-32	CM-33	CM-32	CM-32	CM-33	CM-32	CM-33	CM-34	CM-34	LK-1	LK-2
PRICE	First Zone											
Retail price, installed	$124.50	$154.50	$224.50	$114.50	$144.50	$214.50	$149.50	$219.50	$430.00	$490.00	$ 79.50	$ 84.50
Cabinet finish, exterior	Glyptal						Porcelain				Glyptal	
CABINET DIMENSIONS												
Overall height (inches)	52¾	52¾	56¾	52¾	52¾	56¾	52¾	56¾	62½	62½	36	36
Overall width (inches)	23½	27¼	30	23	26¾	29½	26¾	29½	39	46	21	21
Overall depth (inches)	24⅜	24⅜	26¾	22⅞	22⅞	25⅛	22⅞	25⅛	28	28	23⅞	23⅞
Inside height (inches)	28½	28½	32½	29	29	33	29	33	37	37	13¼	13¼
Inside width (inches)	18	21¾	24	18	21¾	24	21¾	24	33	40	16	16
Inside depth (inches)	15¼	15¼	17	15¼	15¼	17	15¼	17	19½	19½	16	16
Number of doors	1								2	2	1	1
STORAGE CAPACITY												
Net food storage (cu. ft.)	4.3	5.2	7.0	4.4	5.2	7.0	5.2	7.0	12.5	15.4	2.0	2.0
Number of shelves	3½	3½	3	3½	3½	3	3½	3	4	4½	..	..
Total shelf area (sq. ft.)	8.6	10.2	13.0	8.6	10.2	13.0	10.2	13.0	22.7	31.3	..	..
Cabinet finish (interior)	Porcelain											
INSULATION												
Top (thickness in inches)	2⅛	2⅛	2⅛	3	3	3	3	3	2¼	2¼	..	..
Sides	2⅝	2⅝	2⅞	2½	2½	2¾	2½	2¾	2¾	2¾	2½	2½
Back	1⅞	1⅞	2½	2¼	2¼	2⅝	2¼	2⅝	3⅛	3⅛	2½	2½
Door	3½	3½	3½	3¼	3¼	3¼	3¼	3¼	3¼	3¼	2	2
Bottom	2½	2½	2½	2¾	2¾	2¾	2¾	2¾	3	3	2½	2½
ICE CUBES												
Number of shallow trays	2	2	4	2	2	4	2	4	6	6	2	2
Number of deep trays	0								1	1	0	0
Total number of cubes	40	40	84	40	40	84	40	84	128	128	20	20
Total weight of cubes (lbs.)	4	6	11	4	6	11	6	11	14½	16½	2	2
COMPRESSOR												
Ice melting effect 24 hrs. (lbs.)	113	113	113	113	113	113	113	113	146	146	80	80
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/6	1/3	1/3	1/8	1/8
Refrigerant in system (lbs.)	1½ to 3¼ lbs.											
Quantity of lubricant (pts.)	1⅛	1⅛	1⅛	1⅛	1⅛	1⅛	1⅛	1⅛	1⅛	1⅛	4	4
Belt circumference (inches)	34	34	34	34	34	34	34	34	35	35	No belt	
Belt width (64ths of an inch)	26	26	26	26	26	26	26	26	26	26	No belt	
WEIGHT												
Net weight (lbs.)												
Shipping weight (lbs.)	320	340	415	320	340	415	340	415	762	862	173	186

COMPRESSOR
Made by General Electric, open, except LK models; reciprocating; belt-driven, except LK models; compressor located below food compartment. Shaft seal, bellows (none on LK models).

Compressor Model No. CM-32, 33—twin cylinder, 350 r.p.m., 1½-in. bore, 1⅜-in. stroke.

Compressor Model No. CM-34—twin cylinder, 550 r.p.m., 1½-in bore, 1⅜-in. stroke.

Compressor Model No. LK-1, 2—single cylinder, 1740 r.p.m., 1¼-in. bore, 0.66-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, mineral oil.

CABINET
Made by General Electric. Steel frame with Thermocraft insulation, Textolite breaker strip, hollow moulded rubber gasket.

HARDWARE
Made by General Electric of brass with chrome-plated finish.

MOTOR
Split-phase induction type on LK, capacitor type for all others, made by G-E. Oil LK, never; others, annually.

CONDENSER
Made by ———, fan cooled, finned tube condenser.

EVAPORATOR
Made by G-E, stainless steel folded and welded steel-plate type. High side float refrigerant control.

Anodic aluminum and rubber ice trays. Ice tray release.

CONTROL
G-E non-adjustable temperature control. Model No. MIA65 with manual defrosting and vacation cycle on LK models.

G-E adjustable temperature control. Model No. MIA87 (AP series) and No. MIA72 (all others) with wide cycle defrosting and vacation cycle. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.

Guarantee on system: One year on open units; five years on sealed.

Serviced by: Dealers and ditsributors.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES
Aphonic type fan, automatic belt tightener, ice trays in direct contact with refrigerated surfaces, automatic interior light, foot pedal door opener, sliding shelves, flat wire shelves, injectors in evaporator, covered vegetable pans or drawers.

SANITARY

Sanitary Electric Corp., Fond du Lac, Wis.

	Super			Standard			Deluxe					
Model No.	72½	86½	99½	522	700	870	22B	43	55	72	86	99
Compressor Model No.	BA	DA	DA	BA	BA	DA	BA	BA	BA	BA	DA	DA
PRICE	F.O.B. Factory											
Price, F.O.B. factory	$174.80	$204.15	$221.40	$119.50	$139.50	$179.50	$ 95.25	$125.40	$143.35	$165.40	$194.75	$212.00
Cabinet finish, exterior	Dulux			Lacquer			Dulux					
CABINET DIMENSIONS												
Overall height (inches)	53⅛	60⅜	60⅜	54	56¾	59	35	47½	51⅞	53⅛	60⅜	60⅜
Over width (inches)	28½	29½	33⅞	25¼	29¼	35	27	22⅞	24¼	28½	29½	33⅞
Overall depth (inches)	25	25½	25½	21½	25½	24	18	21⅝	23	25	25½	25½
Inside height (inches)	29⅞	35	35	29⅞	30¾	33	12½	25	28⅞	29⅞	35	35
Inside width (inches)	23¼	23¼	27⅝	20¾	22¾	28½	23⅜	18¾	20	23¼	23¼	27⅝
Inside depth (inches)	17⅞	17¾	17¾	14⅝	17½	16	13¼	15½	16⅝	17⅞	17¾	17¾
Number of doors	1	1	2	1	1	2	1	1	1	1	1	2
STORAGE CAPACITY												
Net food storage (cu. ft.)	6.7	7.7	8.7	5	6.5	8	2.11	4	5.25	6.7	7.7	8.7
Number of shelves	6	8	7	5	5	8	2	4	6	6	8	8
Total shelf area (sq. ft.)	14.5	17.2	20.25	10.85	14.4	18.3	4.13	8	11.04	14.5	17.2	20.25
Cabinet finish (interior)	Porcelain											
INSULATION												
Top (thickness in inches)	2½	3	3	2	3	3	2	2	2½	2½	3	3
Sides	2½	3	3	2	3	3	1½	2	2	2½	3	3
Back	2½	3	3	2	3	3	1½	1½	2	2½	3	3
Door	2½	3	3	2	3	3	2	2	2	2½	3	3
Bottom	2½	3	3	2	3	3	2	2	2	2½	3	3
ICE CUBES												
Number of shallow trays	5	5	5	3	3	4	2	3	4	5	5	5
Number of deep trays	0	1	1	0	0	0	0	0	0	0	1	1
Total number of cubes	77	133	133	63	84	112	42	54	58	77	133	133
Total weight of cubes (lbs.)	7	11.5	11.5	4.5	6	8	3	4	4.5	7	11.5	11.5
COMPRESSOR												
Ice melting effect 24 hrs. (lbs.)	96	180	180	96	96	180	96	96	96	96	180	180
Motor horsepower	1/6	1/5	1/5	1/6	1/6	1/5	1/6	1/6	1/6	1/6	1/5	1/5
Refrigerant in system (lbs.)	1	1½	1½	1	1	1½	1	1	1	1	1½	1½
Quantity of lubricant (pts.)	2/3	1¾	1¾	2/3	2/3	1¾	2/3	2/3	2/3	2/3	1¾	1¾
Belt circumference (inches)	35¼											
Belt width (64ths of an inch)	36											
WEIGHT												
Net weight (lbs.)	295	335	380	250	300	365	165	190	265	305	330	380
Shipping weight (lbs.)												

COMPRESSOR
Made by Sanitary, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, bellows. Refrigerant, methyl chloride. Lubricant, Argon oil.

Compressor Model No. BA—single cylinder, 430 r.p.m., 1½-in. bore, 1¼-in. stroke.

Compressor Model No. DA—twin cylinder, 430 r.p.m., 1½-in. bore, 1¼-in. stroke.

CABINET
Made by Sanitary. Wood frame with Hermetex insulation, wood breaker strip, except Standard line, bakelite; rubber gasket.

HARDWARE
Made by Winters & Crampton. Chromium finish.

MOTOR
Capacitor type made by Dagner or Delco. Oil semi-annually.

CONDENSER
Made by Universal Cooler, fan cooled, radiator type condenser.

EVAPORATOR
Super and Deluxe models use special moist air-cooling Hydrocold evaporator, made of copper and brass, chrome finished. Standard line uses Mullins white porcelain on steel. Detroit Lubricator automatic expansion valve refrigerant control. Aluminum and stainless steel ice trays on Super and Deluxe models. Aluminum and rubber Flexo ice trays on Standard line. Ice tray release.

CONTROL
Super and Deluxe models—Ranco adjustable temperature control. Type KR, mounted inside the cabinet. Wide-cycle defrosting with vacation cycle.

Standard line—Tagliabue adjustable temperature control, model R-8, mounted inside, straight range defrosting with vacation cycle.

Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.

Guarantee on system: One year.

Serviced by: Dealer or distributor.

Replacement parts are sold to independent service companies.

SPECIAL FEATURES
Detachable base, food file, swinging shelves, indirect lighting.

Explanation of Data

The net cubic foot content of the refrigerators tabulated in these specifications is calculated on the basis of standards established by the National Electrical Manufacturers Association (Nema). The same applies to shelf area.

Prices are installed prices, unless otherwise noted.

Manufacturers were asked to furnish the condensing unit capacity in pounds of ice melting effect per 24 hours (I.M.E. lbs.) according to the following standards of the American Society of Refrigerating Engineers:

"The capacity of the condensing unit (compressor and condenser) should be the capacity expressed in pounds of ice melting effect per 24 hours of continuous operation in a 90° F. room and at a suction pressure equal to a 5° F. evaporator temperature.

"In conducting the test, the condensing unit should be set so that it is subjected to the same air circulation as it would normally receive in actual service. In other words, since the condensing unit is intended for self-contained installations, the circulation of air to the unit should be restricted in the same manner as would be the case if the unit were actually installed in the cabinet. One pound ice melting effect is equivalent to the extraction of 144 B.t.u."

In describing the operation of the control, the manufacturers were asked to make their answers conform to the following definitions:

"'Manual' means that the motor is shut off by means of a switch on the control, and remains off until the user closes the circuit. 'Wide Cycle' means that the user moves either the switch or temperature knob to the defrost position, whereby the cut-in temperature is raised to a value which permits defrosting. When defrosting is completed, the user returns the knob to the standard setting.

"'Semi-automatic' means that the user moves the knob on the control to the defrost position, raising the cut-in value to a temperature which permits defrosting. When this temperature is reached, the control mechanism will automatically return to the standard position. 'Automatic' means that defrosting is taken care of by a mechanism which opens and closes the motor circuit for a definite length of time every day or every two days.

"'Vacation Cycle' means that the cut-in point is raised above the standard value, but is below the defrost value, the cut-out point remaining practically the same as on the standard setting."

The index on page 12, also on page 30, will assist you in locating specifications of various makes easily.

M & E

Merchant & Evans Co., Philadelphia, Pa.

Model No.	4S	66S	91S
Compressor Model No.	100-D	100-D	115-S
PRICE			
Retail price, installed			
Cabinet finish (exterior)	Porcelain and Dulux		
CABINET DIMENSIONS			
Overall height (inches)	53½	65	70¾
Overall width (inches)	23⅞	30½	33½
Overall depth (inches)	21½	24	24
Inside height (inches)	26⅞	34	39⅞
Inside width (inches)	19½	23⅝	26⅝
Inside depth (inches)	16	16	16
Number of doors	1		
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.00	6.66	8.95
Number of shelves	3	5	6
Total shelf area (sq. ft.)	8.5	12.73	15.38
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	2	3	3
Sides	2	3	3
Back	2	3	3
Door	2	3	3
Bottom	2	3	3
ICE CUBES			
Number of shallow trays	2	2	3
Number of deep trays	0	1	1
Total number of cubes	56	84	112
Total weight of cubes (lbs.)	4½	8¾	11
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	110	110	130
Motor horsepower	1/6	1/6	1/5
Refrigerant in system (lbs.)	2	2	1¾
Quantity of lubricant (oz.)	8	8	8
Belt circumference (inches)	36	36	36
Belt width (64ths of an inch)	42	42	42
WEIGHT			
Net weight (lbs.)			
Shipping weight (lbs.)			

COMPRESSOR
Made by Merchant & Evans, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. 100-D—single cylinder, 625 r.p.m., 1½-in. bore, 1¼-in. stroke.

Compressor Model No. 115-S—twin cylinder, 525 r.p.m., 1¼-in. bore, 1¼-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, Suniso No. 2.

Shaft seal, diaphragm.

CABINET
Made by Seeger Refrigerator Co. Metal frame with Dry-Zero insulation, bakelite breaker strip, rubber gasket.

HARDWARE
Made by ———— of cast brass with chrome finish.

MOTOR
Repulsion-induction type made by Wagner. Oil every 6 mos.

CONDENSER
Made by Long Mfg. Co., fan cooled, fin-tube radiator type.

EVAPORATOR
Made by McCord Radiator & Mfg. Co. of copper. Dry expansion refrigerant control. Mayson or Aminco expansion valve. Aluminum ice trays.

CONTROL
Made by Tagliabue, adjustable temperature control, Model R-18, mounted inside the cabinet. Manual defrosting, ———— overload protector.

POLICY
Guarantee on cabinet:

Guarantee on system: One year.

Serviced by:

Replacement parts are sold to independent service men.

ELECTRIC
REFRIGERATION NEWS

Registered U. S. Patent Office
Copyright, 1936, Business News Pub. Co.
Published Every Wednesday by
BUSINESS NEWS PUBLISHING CO.
5229 Cass Ave., Detroit, Mich.
Telephone Columbia 4242.
Cable Address: Cockrell—Detroit

Subscription Rates
U. S. and Possessions, Canada, and all countries in the Pan-American Postal Union: $3.00 per year; 2 years for $5.00. All other Countries: $5.00 per year.

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VOL. 17, NO. 17, SERIAL NO. 370
APRIL 22, 1936

The Perils of Publishing

EVERY newspaper reporter is familiar with that classic definition: "If a dog bites a man, it *isn't* news, but if a man should bite a dog, *that's news.*"

In the course of our own experience with the problems of editing a trade paper in a highly competitive industry, we have found another simple rule for the guidance of beginners: "If they *want it published,* it usually isn't news, but if they *don't* want it published, it probably *is* news."

We can recommend that precept as a sure-fire circulation builder, but we will admit that it is no help in securing quiet and repose in the editorial offices. Complaints of disappointed contributors are small worry compared to the anguish over the publication of information which may be "used" by designing competitors.

Another good way to make life interesting around a trade paper office is to send the editor on a trip around the world. That stunt also brings in many new subscriptions but, judging from letters published on this page, there will be "hell to pay" in every port.

We fully realize that it is a matter of real concern to individuals and corporate interests when any statement appears in the NEWS (or is made by a member of the staff) if such statement has the effect of adding fuel to the competitive fire. We know well enough that many salesman (and high-ranking sales executives) delight in searching the columns of the NEWS for bits of information which may be shown or quoted with telling effect upon a wavering prospect.

We have often been reminded of our obligation to report news accurately and we are keenly aware of that responsibility. However, there seems to be a feeling on the part of many business men that a trade paper should report only the "good news" and that it should religiously avoid anything unfavorable to their interests.

That attitude is understandable when we consider the editorial content of the average trade paper which, all too often, is little more than a "puff sheet" for its advertisers. We have known men of long experience in other fields to be positively startled to find a trade paper that did not speak softly and tread lightly on all matters affecting the interests of advertisers.

Our own attitude is that we have no desire or intent to injure any worthy enterprise. We like the industry and our aim is to render a worth-while service to it. We firmly believe that the best interests of the industry will be served by the widespread dissemination of information which will lead to a clearer and more intelligent understanding of the industry's problems and opportunities.

When any undesirable condition prevails we believe that the best remedy is to acquaint our readers with the facts. If it appears that the complete facts are not obtainable, we frankly adopt the expedient of publicizing the partial information available. That procedure is remarkably effective, we find, in "smoking out" the missing data.

Letters from readers, who call attention to errors, or present opinions at variance with published reports, are most welcome. We are accustomed to criticism and appreciate the opportunity it affords to correct the record or explain our viewpoint.

While annoyance may be caused by the occasional publication of inaccurate material, such injuries are surely well compensated by the availability of a medium which may be depended upon to give unbiased news and which is not subservient to any malign influence.

The NEWS has achieved a reputation for *independence* such as few trade papers enjoy. We believe that this issue contains impressive evidence to support the belief that the industry respects the editorial policy of the paper and recognizes the value of its service.

"Quoted"

Inescapable Facts on Rural Electrification

ELECTRICITY is indeed a desirable addition to farm life. It will save the wages of a hired man by pumping water, milking cows, grinding feed and performing other chores. It will add years to the life of the farmer's wife by lifting from her bowed shoulders a great part of the weight of household labor. It will make the farm home more livable. It will do all this and much more. Every farm in the country should have electric service, and no less achievement than this will satisfy the American ideal.

This is great stuff and makes swell headlines for the newspapers and we all cheer for it. But how many of us want to dig down in our jeans for the money necessary for the farmer to enjoy the great boon of electricty? It is to be feared that more than a few are going to point out that such boons as they have personally enjoyed have resulted from their own hard work and they see no reason why they should pay for boons for some one else. The thin edge of irritation in their voices is caused by their realization that they are already contributing quite generously to the farmer's more abundant life through the subsidies of the government.

Another fact is that rural service lines cannot be built to any universal specification. And, aside from the consideration that it would immensely simplify centralized planning, there is no good reason why they should be, and there are many good reasons why not. Climatic and topographic conditions range between wide extremes in this country. Quality of service is an erratically variable concept up and down the land. And what is sufficient and seemly to one man may be grossly inadequate and shoddy to another. These differences, and many others, appear in the design and construction of rural lines and it is useless and unnecessary to attempt to erase them.

The electrification of rural America is a job for business, not for politics, however seductive may be its promises. Farm service holds out very real and very large commercial possibilities to the whole electrical industry. These possibilities can be transformed into solid and worth-while accomplishment by reaction with the enlightened selfishness of good business judgment. It will be a shame indeed if the possibilities of electricity for raising the standards of rural life are perverted and prevented from full realization by forcing them into the devious ways of politics.—*Electrical World.*

Letters

Effect of Hawaiian Climate On Insulation

Wood Conversion Co.
Manufacturers and Distributors
Insulating & Sound Deadening Materials,
Balsam-Wool—The flexible insulation against heat, cold, and sound.
360 North Michigan Ave., Chicago
April 15, 1936.

Publisher:

Mr. Taubeneck's articles about his trip around the world have been extremely interesting—especially the one written from Hawaii. In the issue of April 1 he quoted some rather broad statements regarding the effect of the Hawaiian climate on insulations. There is no doubt about the effect of such a climate on all insulations, but we certainly doubt his quoted statement that only two materials will give satisfactory service.

Even if this comment were true, we question whether it is ethical to name a proprietary product in editorial matter.

To the average reader, the printed word carries certain authority, and as the largest suppliers of domestic refrigerator insulation we feel justified in questioning the fairness of printing for circulation throughout the industry the opinion of one person on a matter so important to the industry. Obviously, if the statement were true, the two materials mentioned would properly be used exclusively throughout the world—which is far from being the case.

Of course, an insulation is thoroughly tested by competent engineers before being adopted by any refrigerator manufacturer, and the concensus of opinion certainly does not support Mr. Giles' assertion. For instance, please refer to Table 3 of the report published in your March 25 issue, covering tests made at the University of Wisconsin for Consumers' Research. The results flatly contradict Mr. Taubeneck's quoted statements. (We are attaching a copy of this table, for your convenience.)

The increasingly general acceptance and use of any material by a majority of manufacturers over a period of years is conclusive evidence of satisfactory performance.

D. H. CORLETTE, Sales Mgr.,
Railroad & Industrial Dept.

Answer: It may be true that "the increasingly general acceptance and use of any material by a majority of manufacturers over a period of years is conclusive evidence of satisfactory performance," but we do not agree that such a condition precludes the possibility of further development or the possibility of exceptions to the "satisfactory performance."

We might be equally justified in making the statement that "the increasingly general acceptance of this publication as a medium for the dissemination of industry news over a period of years is conclusive evidence of its satisfactory service." That does not preclude your disagreement with a particular statement or even the possibility that some statements published in the paper may be unsatisfactory to a number of readers.

We are very glad, however, to grant you the privilege of expressing *your own opinions* on the subject, including your complete disagreement with the opinions expressed by Mr. Giles as reported by Mr. Taubeneck. If we printed only the news which would meet with the *unanimous* approval of our readers, we fear that the editorial content of this paper would soon approach absolute zero.

Referring to the second paragraph of your letter, we do not see how any question of "ethics" is involved if we may assume that Mr. Taubeneck has honestly reported the opinions of Mr. Giles. We certainly cannot agree with the idea that there is anything unethical (or immoral) about the naming of a proprietary product in editorial matter. The columns of the NEWS are full of such references and we have never hesitated to mention any product by its proprietary or trade name.

As for the "fairness of printing for circulation throughout the industry *the opinion of one person* on a matter so important to the industry," we see no reason why opinions of individuals who have had practical experience should not be printed in the NEWS and furthermore we believe that the experiences of service men are of very definite value.

Very frankly, we do not believe that all worthwhile knowledge is held exclusively by the engineers, or that all others should be forbidden the right to express contrary opinions.

Regarding the tests made by the University of Wisconsin, as published in the March 25 issue, this material was published for the information of the industry for whatever value it might have. We are not of the opinion that the findings of the University of Wisconsin are final. We have not given endorsement to these findings and have expressed no opinion as to their merit.

Mr. Taubeneck is making a trip around the world for the purpose of finding out what refrigeration men in various foreign countries are thinking of doing. His attitude is that he should report things *as he finds them.* He is not commissioned to write advertising for any product nor is he attempting to find information which will be favorable to certain products or unfavorable to others. The chief value of Mr. Taubeneck's reports is that they represent an unbiased viewpoint and that they are not colored by prejudice for or against any particular type of equipment, parts or material.

Please keep in mind that Mr. Taubeneck has had several years' very active experience contacting the producers and distributors of all makes of refrigeration equipment, that he is quite familiar with commercial practice in this country and that he is fully aware of competitive conditions. He has demonstrated his ability to uncover factual information in this field and he has a reputation for considerable skill in reporting news accurately. It is important to note also that Mr. Taubeneck has not undertaken this trip with a view of proving any particular theory or preconceived idea of conditions *as they should be.* He is interested in finding out about conditions *as they exist* and in reporting his findings to the subscribers of the paper.

'Ranking' of Crosley and Fairbanks-Morse

Spedding Limited
Commerce Building
Cr. Beach Road and Anzac Ave.
Auckland, C.1., New Zealand
March 24, 1936.

Editor:

We noticed that you passed through Auckland recently on a world tour and we understand that whilst in this city you spent some little time with Mr. McAlpine who is interested in refrigeration in Auckland.

At the outset we should like to state that we have been engaged in the sale of domestic refrigerators for many years. We were New Zealand Agents for The Grigsby-Grunow Co., Chicago, and placed their Majestic refrigerators on this market when they were in the manufacturing field. During recent years, we have been selling the Fairbanks-Morse refrigerator and are pleased to say that our efforts in this direction have proved very successful. Although we had a very bad summer in the season just ending, greater sales were effected of Fairbanks-Morse than of any other make.

We mention the above in order that you will realize that we are very definitely interested in the refrigeration field.

Our object in writing is to endeavor to obtain some information from you relative to statements which you are alleged to have made in Auckland regarding the sale of various makes of refrigerators in your country. We have been informed that you stated an analysis of the figures made available to you, disclosed the fact that the volume of sales of the various makes of refrigerators resulted in the following ranking:

1. General Motors—Frigidaire
2. General Electric—G-E
3. Kelvinator Corp.—Kelvinator
4. Westinghouse Co.—Westinghouse.

You are alleged to have stated that the Fairbanks-Morse ranked very poorly and that the Crosley refrigerator was about the bottom of the list. These statements are at present being made by some of our opposition, and as previously mentioned, are alleged to have been made by you.

As we are most anxious to ascertain the correct state of affairs, we should greatly appreciate it if you would let us have official figures if possible. Failing that, would you be good enough to confirm or deny the statements which are alleged to have been made by you. W. A. BOUCHER,
Managing Director.

Answer: Unless our world-exploring editor imbibed too freely of some strange but potent native beverage, we are quite sure that he has been either misquoted or misunderstood.

While we do not know with certainty exactly what he *did say,* we are familiar with statements he has made frequently on this subject and we know what he would be *likely to say* in answer to any question regarding the rank of leading manufacturers, based on their 1935 production.

We receive a great many inquiries on this question of "rank" and our stock answer is that we cannot furnish official data because the principal companies do not release information regarding their production or sales *for publication.* They do turn in their figures each month to the Statistical Dept. of National Electrical Manufacturers Association (Nema), but the individual returns are closely guarded and only the *totals* for the entire group are released. The totals (classified by types and sizes of equipment) are published regularly in the NEWS.

Now we do occasionally learn about the sales records of some companies and we manage to get a pretty good idea of relative standing of the leaders by piecing together the bits of information gleaned from a variety of sources. This knowledge is often *reflected* in the news columns and regular readers of the paper should have no difficulty in figuring out rough approximations of the progress being made by the various companies.

Thus it is generally known that Frigidaire and General Electric were the largest producers for several years and that first one and then the other was reputed to rank first. More recently Kelvinator (including Leonard) has been known as contender for the top position. These three companies account for a substantial share of the total business.

But there are several others which must be considered as *large volume* producers even though they have not claimed title to the top position. For example, Crosley is certainly a very important factor in the industry having made 168,000 units in 1935. Crosley's *rate of growth* during the past few years has been considered quite phenomenal, as Mr. Taubeneck well knows, hence we are sure that he would not refer to Crosley in the terms mentioned in your letter.

Referring to Fairbanks-Morse, it is true that this company is not yet in the front row but "poorly" does not properly describe their position. Fairbanks-Morse entered the field with a limited output in 1934. Last year (1935) they made their *first* aggressive bid for distribution. Obviously their 1935 rank would not be particularly significant. It should be noted, however, that Fairbanks-Morse is an old and substantial concern (although new in refrigeration) and that their present production (April, 1936) is reported to be 300 units per day.

Source of 'Freezing Jelly'

Glenn Muffly
51 East 42nd St., New York
April 17, 1936.

Editor:

On the last page of your April 15 issue, under the heading "Questions," I note your reply to letter No. 2736.

The inquirer asked about a "Jelly Solution" for use in ice cream cabinets in place of brine. Without doubt he means a "Freezing Jelly" or "Eutectic Jelly" such as is manufactured by the Savage Arms Corp. of Utica, N. Y., and marketed through their New York City office at 100 East 42nd St.

Freezing solutions of the jelly type are covered by De Remer Patent No. 1,861,957 issued June 7, 1932, and owned by Mr. De Remer and myself. The Savage Arms Corp. is licensed under this patent and are the only manufacturers who are in production and selling the "Jelly Solution" separate from equipment.

The company mentioned in your reply has no license to make the "Jelly Solution" under our patent.

Prospective purchasers of the "Jelly" should be referred to the Savage Arms Corp., 100 East 42nd St., New York City. The inventor and part owner with me of the patent is J. G. De Remer, 51 East 42nd St., New York City. GLENN MUFFLY.

'Now We Know' Dept.

Holcomb & Hoke Mfg. Co.
Indianapolis, Ind.
April 17, 1936.

Editor:

We appreciate the story given our case in your issue of April 15.

However, we call your attention to the fact that in the copy furnished you we did not state that the case was "undamaged." If you will refer to the copy of the story sent you, you will note that Mr. Goodlet "found the glass setting entirely free of water—in fact, there is no moisture between the glass."

The point of our story was the perfection of the process by which our display glass is dehydrated.

The new case which this merchant ordered replaced the one which was—except for the display glass—damaged by the flood. S. E. STUART,
Mgr., Advertising Dept.

Flooded Units for Export

Rocke International Electric Corp.
15 Laight St., New York

Editor:

We are looking for a manufacturer who is free in the export field, producing flooded type units such as are used in water coolers, ice cream freezers, etc.

If you know of anyone other than Fedders, we would like to know who they are. W. H. KNAPP,
Export Dept.

Department Store Salesmen Tell Factors that Led to Sales in Report to Vining 'Clinic'

By Eleanor Blum

MANSFIELD, Ohio—New competition in selling methods, and loss of price appeal should make the department store refrigeration salesmen wary of losing their specialty training and becoming merely department store clerks, V. E. "Sam" Vining, director of department store sales for Westinghouse warns in his "Report on Sam's Sales Clinic," an analysis of the strengths and weaknesses of a department store set-up.

"The clinic," the booklet explains, "was started as an effort to study actual selling conditions of electrical refrigerators on department store floors and, through an analysis of hundreds of sales, determine whether certain fundamentals should be recognized by all of us."

"Where Did the Lead Originate," "Where Was the Sale Closed," "General Factors in the Sale," "Product Factors in the Sale," "Other Factors," and "Sales Contact Data" were the subdivisions into which the questions were divided.

Where Did Lead Originate?

In answer to the first question, "Where did the lead originate," the records show that 64% of the prospects dropped in at the store; 14% were obtained from cold canvass; 7% from present users; 6% from some particular advertisement; 4%, furnished by a store employee; 3%, miscellaneous; and 2% from service calls.

The high percentage in the first classification, Mr. Vining says, should serve as a warning to department store salesmen.

"Specialty selling," Mr. Vining points out, "has always been a business in itself, and has consisted very largely in 50% obtaining prospects and 50% closing them. If we are to delegate the entire responsibility for obtaining prospects to the store, we cease to be specialty salesmen, and our earning ability must of necessity drop to the level of an ordinary clerk."

"This is particularly true if the salesman, in addition to depending entirely on the store traffic for his business, finds, on analysis of his sales, that they are made up largely of specials, distressed merchandise, or low priced refrigerators that represent actually very little selling."

The 14% for cold canvass, Mr. Vining regards as surprisingly high, and an indication that a large number of stores recognize cold canvass as one of the backbones of specialty selling.

Users Too Little Used

In contrast, the 7% reported for leads from present users he looks upon as an indication of the department store's most vulnerable point.

In spite of the fact that a department store's, opportunities along this line are great than any other dealer's, evidently the department store salesman has been missing this opportunity almost entirely.

"Perhaps," Mr. Vining says, "the answer lies in the fact that, since 64% of the sales are coming from drop-ins, salesmen are probably scared to death to follow-up users after sales are made."

The tendency for old line specialty men, who for years worked in dealer organizations where 50% of the sales were made through users, to drop their most productive source of prospects is apparent.

Every department store manager, and every individual salesman should establish a well thought-out and well planned user follow-up program, maintains Mr. Vining.

He reminds the management, however, that any "Use the user" program should have as its foundation a distinctive service to the user.

"It is absurd to expect a user to be continually giving out prospects merely because once upon a time she spent some money with us. An inspection service, however, or service such as passing out recipe books, seasonable recipe suggestions, home service helps, or any other of a hundred things which are a distinct benefit to the user, will pay its way over and over again," according to Mr. Vining.

The 6% of leads gained from some particular advertisement, Mr. Vining classifies as exceptionally high, especially since during the period of the clinic, which was at a time when many stores were featuring specials of other makes, there were no Westinghouse specials available, and all sales were made at regular prices.

Store employees are a source of prospects too little used in most stores, Mr. Vining believes. The 4% credited to them in this survey, he says, however, should give any manager or salesman who lays plans to utilize the store organization every expectancy of success.

With such a large percentage of stores having their service work performed by outside companies, service calls are almost closed to them as a source of prospects, so that the 2% credited there doesn't seem small, the pamphlet says. Stores that are doing their own service work, however, should be sure that the department is proving a source of sales.

Telephone Canvass Neglected

The clinic returns indicate that the department store and the furniture store have left the telephone canvass to other types of dealers.

"Every department store in America has a telephone," the author reminds the salesmen, "and a visit to any refrigeration department will show any number of salesmen who apparently have plenty of time to use the telephone, providing a plan were laid out for them."

"The department store can expect to lose the price appeal which has drawn so many people to its floors, for price becomes secondary as terms increase in length."

Sometimes, too, Mr. Vining warns, low priced merchandise becomes a liability to a store on long time purchases, because as every department store manager knows, every refrigerator sold carries the store's guarantee until it is completely paid for regardless of any formal guarantee given with the refrigerator.

"The salvation of the specialty man in the department store field is to retain his specialty characteristics; and the only way to retain these characteristics," Mr. Vining concludes, "is to use every procedure of specialty selling which will produce more business than any other clerk could produce, standing in the refrigerator department, and accepting such business as comes along."

"Where was the sale closed," is the question asked in the next section and the answers were: on the floor without visit to home, 62%; on the floor following call to home, 16%; in the home following visit to store, 15%; in the home without visit to store, 7%; during the day, 89%; night, 11%.

The fact that the sales closed on the floor without a visit to the home are only 2% less than the number of leads obtained on the floor, should serve as a danger signal, Mr. Vining maintains. It is strong evidence that the salesmen are closing the easy ones and letting the hard ones slip through their fingers into the hands of other selling organizations.

"The 'easy ones' are, in most instances, people who are attracted by price, bargains, and small refrigerators. The 'hard ones' are the people who are actually giving serious thought to size and quality. The situation indicates that many salesmen are content with a volume of low price sales tickets, even as they see the larger sales slipping through their fingers.

Cold Canvass Brings Results

Correlation of the 16% of sales closed on the floor following call in the home, and the 14% of leads gained by cold canvass would seem to indicate that cold canvass is highly profitable, the author believes.

Indicating the effectivness of the home follow-up, 15% of the sales were closed in the home following a visit to the store, showing that if those stores that disapprove of this method would adopt the home follow-up, they would automatically increase their business at least 15%.

The 7% of sales made in the home without a visit to the store, indicates the acceptance of the public of anything that comes from a well established department store, and public acceptance of the product sold.

Apparently the fact that the department store rings a bell at 5:30 is getting salesmen in bad habits, Mr. Vining surmises from the 11% given for sales closed at night. This is particularly disappointing, he believes, because the clinic was held during what should have been the busiest part of the refrigeration season. He warns again against the danger of losing independence of action, and the aggressiveness of specialty selling to become eventually merely department store clerks.

Under "General Factors in the Sale," Mr. Vining points out that interesting observations may be made from them, even though no specific conclusions can be reached.

Drawing power of a store name, and the fact that the department store is looked on as a kind of mart, where the buyer can see several makes of refrigerators is indicated by the fact that only 38% of the customers asked for a specific make.

The next group of figures belie the growing feeling of the last few years that getting the husband and wife together is no longer necessary. The question were:

Contact on both husband and wife? yes, 38%, no, 62%; Was husband major factor in the sale? yes, 38%, no, 43%; Was wife major factor in the sale? yes, 44%, no, 30%; Husband and wife equal factors? yes, 25%; Did wife purchase without husband present? yes, 40%, no, 60%.

Contact Both Parties

Apparently, the writer contends, the "double load" or contacting of both the husband and wife is still important and the department store should start to include special features which will appeal to the husband too.

Other questions and their answers were: Did prospect have definite idea how much to spend? yes, 16%, no, 9%; Did prospect have definite size in mind? yes, 21%, no, 7%; Did prospect purchase larger size than had in mind? yes, 10%, no, 13%; Did prospect purchase better quality than had in mind? yes, 15%, no, 4%.

All reports did not give specific answers to these questions.

Size is apparently the salesman's tallest hurdle because only 10% purchased a larger size than they had in mind.

Apparently this is not true of "quality" because 15% were sold a higher quality refrigerator than asked for, and only 4% stuck to their low price idea.

To the writer, these figures offer an effective answer to the department stores' reputed inability to "sell-up," a reputation earned in the earlier days of department store selling when many stores started in the business handling low priced merchandise, with salesmen who were not experienced, and not well trained.

Product Factors in Sale

Answer to the question concerning products factor in the sale reveal that there is an interest in certain type of mechanical discussion.

The hermetically sealed unit was an important factor in 61% of the sales; the built-in watchman in 39%; and forced-draft cooling in 27%.

Although the early days when every salesman was forced to assume the role of an engineer in order to impress the buyer are gone, certain mechanical fundamentals, Mr. Vining contends, have not lost their sales influence.

The five year protection plan influenced 56% of the buyers in their purchases, and the reputation and use of other Westinghouse products influenced 44%. With all of the finance plans making for longer terms, the store should have an increasing interest in the five year guarantee which protects the customer and protects the store, he says.

Convenience features were credited with having been a factor in 30% of the cases, and economy of operation in 10%; figures which seem surprisingly low to the author.

It may be that too much emphasis has been placed on accessories and gadgets, and that the buyers have gradually accepted the economy of electric refrigeration and no longer bring it up, Mr. Vining says.

Either the salesmen in the department store are the world's fastest closers, or a lot of business is being missed which might be had with a bit more persistence, Mr. Vining concludes from the following figures on sales contact data: Answers to the qustions, "How long between first contact and close?" were:

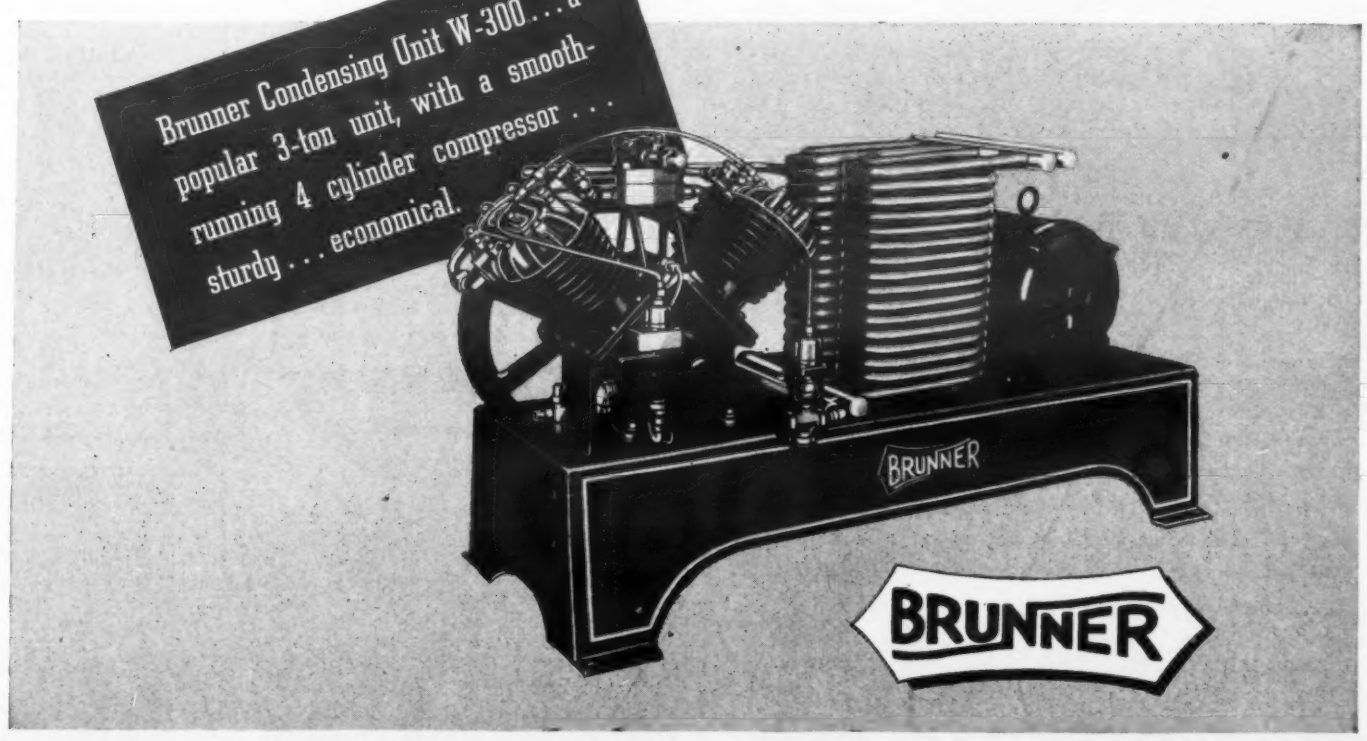
Closed on first day, 52%; second day, 11%; third, 5%; fourth, 2%; in one week, 6%; in two weeks, 1%; in one month, 4%; in two months, 2%; in three months, 3%; not stated, 10%.

"How many contacts were made?": sold on first contact, 44%; on second contact, 29%; on third, 8%; on fourth, 5%; on fifth, 1%; on sixth, 2%; and sold after more contacts, 7%.

"Say...I'D CALL THAT *Plush Padded* SILENCE"

That's the first thing the owner of a new Brunner Refrigeration Unit said. The only sound he could detect was a gentle purr! Truly, "plush padded" silence. ★ ★ A good many years of study, experience and mechanical skill have made possible, not only this quiet smoothness of operation, but the many companion qualities —Brunner dependability, for example, and freedom from repairs, power-saving efficiency.

Team up with Brunner. Share in the satisfaction which has lifted Brunner Condensing Units and Compressors to so prominent a position in the Industry . . . Remember: there's a Brunner unit for almost every refrigeration need . . . forty-one condensing units, eight compressor models; from 1/6 H.P. to 15 H.P.; air and water cooled; electric motor or gas engine driven. Complete details on request. Brunner Manufacturing Company, Utica, N. Y., U. S. A.


Brunner Condensing Unit W-300 . . . a popular 3-ton unit, with a smooth-running 4 cylinder compressor . . . sturdy . . . economical.
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GRUNOW

General Household Utilities Co., Chicago, Ill.

	50M	51M	58M	61M	67M	70R	82R
Model No.	50M	51M	58M	61M	67M	70R	82R
Compressor Model No.	681	681	681	681	681	831	831
PRICE							
Retail price, installed							
Cabinet finish, exterior	Grunow-deluxe (glyptal)						
CABINET DIMENSIONS							
Overall height (inches)	53⅛	53⅛	56⅝	57⅞	58⅜	58⅜	62¼
Overall width (inches)	24½	24¾	25½	27⅜	29⅞	29⅞	31¾
Overall depth (inches)	24¾	24¾	26⅝	25½	26⅞	26⅞	26⅞
Inside height (inches)	28⅛	28⅛	31⅜	32	32⅛	32⅛	36
Inside width (inches)	19⅝	19⅝	19¼	21¼	23	23	25
Inside depth (inches)	17¼	17¼	17¼	16¼	16¾	16¾	16¾
Number of doors	1						
STORAGE CAPACITY							
Net food storage (cu. ft.)	5.03	5.03	5.6	6.02	6.7	6.7	8.2
Number of shelves	3	3	3	4	4	4	5
Total shelf area (sq. ft.)	10.4	10.7	10.78	11.8	14.5	13.72	15.2
Cabinet finish (interior)	Porcelain						
INSULATION							
Top (thickness in inches)	2	2	2½	2½	3	3	3
Sides	2	2	2½	2½	3	3	3
Back	2	2	2½	2½	3	3	3
Door	2¼	2¾	3½	2¾	3½	3½	3½
Bottom	2½	2½	2½	3	3	3	3
ICE CUBES							
Number of shallow trays	2	2	2	2	2	4	4
Number of deep trays	0	1	1	1	1	1	1
Total number of cubes	64	128	128	128	128	156	156
Total weight of cubes (lbs.)	5	10	10	10	10	12½	12½
COMPRESSOR							
Ice melting effect 24 hrs. (lbs.)	110	110	110	110	110	136	136
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/5	1/5
Refrigerant in system (lbs.)	3.53	3.8	3.8	3.8	3.8	4.1	4.1
Quantity of lubricant (oz.)	36	36	36	36	36	36	36
Belt circumference (inches)	No belts						
Belt width (64ths of an inch)	No belts						
WEIGHT							
Net weight (lbs.)	244	256	290	285	336	378	420
Shipping weight (lbs.)							

COMPRESSOR
Made by Grunow, sealed, rotary, direct-driven compressor located below food compartment.
Compressor Model No. 681—1730 r.p.m. Compressor Model No. 831—1730 r.p.m.
Refrigerant, Carrene (CH_2Cl_2). Lubricant, Grunow brand. No shaft seal.

CABINET
Made by Grunow. Steel frame, Dry-Zero insulation, bakelite breaker strip (wood on 50M, 51M, 61M), rubber gasket.

HARDWARE
Made by various firms from Grunow dies. Chromium finish.

MOTOR
Capacitor type made by Grunow. Permanently oiled.

CONDENSER
Made by McCord Radiator & Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR
Made by Grunow, "O" type with single header made of sheet brass, hydrogen brazed.
Carrene meter refrigerant control.
Anodic aluminum and rubber ice trays. Ice tray release on models 58M, 61M, 67M, 70R, 82R.

CONTROL
Cutler-Hammer adjustable temperature control No. 10708, mounted inside the cabinet.
Wide-cycle defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year plus four-year service contract.
Serviced by: Dealers or distributors.
Replacement parts are not sold to independent service companies.

SPECIAL FEATURES
All models—interior light, rapid freeze position on control. Models 70R, 82R—foot pedal door opener.

SPARTON

Sparks-Withington Co., Jackson, Michigan

	S-466	D-466	S-616	D-616	S-746	D-746	D-906
Model No.	S-466	D-466	S-616	D-616	S-746	D-746	D-906
Compressor Model No.	D-939						
PRICE	Zone 1 prices						
Price, F.O.B. Jackson	$119.50	$139.50	$149.50	$184.00	$177.50	$203.50	$244.00
Cabinet finish, exterior	Sparlac						
CABINET DIMENSIONS							
Overall height (inches)	56⅞	56⅞	54⅞	54⅞	54⅞	54⅞	57⅝
Overall width (inches)	24¼	24¼	27½	27½	29½	29½	35½
Overall depth (inches)	22	22	24⅞	24⅞	26⅞	26⅞	28⅜
Inside height (inches)	29½	29½	27⅝	27⅝	27⅝	27⅝	29⅜
Inside width (inches)	18¼	18¼	21⅝	21⅝	23⅝	23⅝	27⅝
Inside depth (inches)	14¾	14¾	17¾	17¾	19¾	19¾	19
Number of doors	1	1	1	1	1	1	2
STORAGE CAPACITY							
Food storage (cu. ft.)	4.6	4.6	6.1	6.1	7.4	7.4	9.0
Number of shelves	4	4	4	4	4	4	4
Total shelf area (sq. ft.)	8.7	8.7	12.0	12.0	14.5	14.5	17.1
Cabinet finish (interior)	Porcelain						
INSULATION							
Top (thickness in inches)	2⅜	2⅜	2⅜	2⅜	2⅜	2⅜	2⅜
Sides	2⅜	2⅜	2⅜	2⅜	2⅜	2⅜	5⅜
Back	2⅜	2⅜	2⅜	2⅜	2⅜	2⅜	5⅜
Door	2⅝	2⅝	2½	2½	2½	2½	5⅜
Bottom	2⅞	2⅞	2⅞	2⅞	2⅞	2⅞	3⅞
ICE CUBES							
Number of shallow trays	3	3	5	5	5	5	6
Number of deep trays	0	0	0	0	0	0	0
Total number of cubes	42	42	70	70	70	70	84
Total weight of cubes (lbs.)	4.1	4.1	6.7	6.7	6.7	6.7	9.3
COMPRESSOR							
Ice melting effect 24 hrs. (lbs.)							
Motor horsepower	1/6	1/6	1/6	1/6	1/6	1/6	1/6
Refrigerant in system (oz.)	20	20	20	20	20	20	20
Quantity of lubricant (oz.)	14	14	14	14	14	14	14
Belt circumference (inches)	29.2						
Belt width (64ths of an inch)	32						
WEIGHT							
Net weight (lbs.)	256	265	290	300	310	326	421
Shipping weight (lbs.)							

COMPRESSOR
Made by Sparton, open, reciprocating, belt-driven compressor located below food compartment.
Compressor Model No. D-939—single cylinder, 540 r.p.m., $1\frac{7}{16}$-in bore, $1\frac{7}{16}$-in stroke.
Refrigerant, sulphur dioxide. Lubricant, Suniso No. 2. Shaft seal, low-side bellows type.

CABINET
Made by Sparton. Steel frame with Spartan-Balsam Wool insulation.
Panelyte breaker strip, rubber balloon type gasket.

HARDWARE
Made by Winters & Crampton with chrome finish.

MOTOR
Capacitor-start type made by Delco. Oil semi-annually.

CONDENSER
Sparton turbo-type fan cooled, copper tubing with soldered radiating fins.

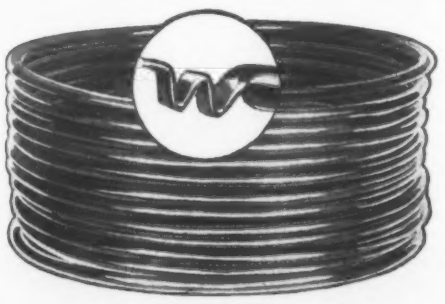
EVAPORATOR
Made by Sparton, dehydrated drawn brass, direct type evaporator of arbor-wound copper tubing.
Mayson expansion valve refrigerant control. Aluminum ice trays. Tray release.

CONTROL
Tagliabue adjustable temperature control.
Model C2411, mounted inside the cabinet. Standard models, wide-cycle defrosting; deluxe models, automatic defrosting with vacation cycle on both. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year plus 4-year optional replacement contract.
Serviced by: Original dealer and territorial distributor.
Replacement parts are sold to independent service companies if they are authorized Sparton service stations.

SPECIAL FEATURES
Vegabin, Baskador, Baskadrawer, dehydrator, kontanerette, bottle storage space, sliding shelves, interior light, acid resisting liner, automatic defrost electric clock, fast freezing unit.

WOLVERINE TUBING



BACKS YOUR GUARANTEE

There is nothing quite as discouraging to the purchaser of a refrigerator or air condition system as having it fail within a short time after installation. He is very apt to lose his confidence in both the equipment and the firm which installed it.

How often has this situation developed simply because of scale or shop dirt in the copper refrigerant or water lines? It takes very little dirt to foul a valve or clog up a spray nozzle.

That is precisely why Wolverine goes to extremes in furnishing Refrigeration Tubing which is absolutely clean and bright inside and outside. The name Wolverine stamped on every foot of this tubing is your guarantee of cleanliness and your protection against trouble with your equipment due to dirty tubing.

Use Wolverine tubing and keep your customer's good will.

WOLVERINE TUBE CO.

SEAMLESS COPPER BRASS & ALUMINUM

1411 Central Ave. Detroit, Mich.

Shapiro Leads Leonard Dealer Campaign

NEWBURGH, N. Y.—Shapiro Sporting Goods Co. took the lead in the nation-wide Leonard Campaign for dealers by signing and shipping merchandise to 50% of its yearly quota of dealers during the first ten days of the campaign, officials of the distributorship here declared.

BARE COMPRESSORS FOR ASSEMBLERS and SERVICE COMPANIES

1/6 to 15 H.P. Standard High, "M&E" Quality

WRITE FOR COMPLETE CATALOG

An invaluable reference for individuals and organizations.

10th Successful Year in Refrigeration Est. 1866

MERCHANT & EVANS CO.
PHILADELPHIA

Apartment Renters Pay $3.50 More Rent for Refrigerators

KANSAS CITY—H. C. Davis, sales manager of the apartment house division of Midwest Electric Appliances, Inc. General Electric distributor here, recently sold a number of "liftops" to an apartment house owner who worked out a new method for purchasing the units.

The apartment house proprietor offered electric refrigeration, with electricity rates paid, to those of his tenants who wished to pay $3.50 per month. Two-thirds of the rentees purchased the service.

Under the terms by which the owner contracted to buy the refrigerators, he is required to pay $2.25 per month for three years. Electricity costs are estimated by 50 cents per month.

Binder's Goes Exclusive On Westinghouse

TRENTON, N. J.—Binder's, electrical contractor here, has discontinued all lines of refrigerators except Westinghouse, for which it has secured an exclusive distributorship in this territory.

The company sold more than 500 refrigerators last year. March sales this year were 100% higher than for any previous March, according to Herbert MacKenzie, sales manager.

Ingersoll Represents Pemco On Pacific Coast

LOS ANGELES—Porcelain Enamel & Mfg. Co., of Baltimore recently appointed Harry Ingersoll of this city as Pacific Coast representative.

KRAM-R-FIN UNITS are companions to the KRAMER and DOWNFLOfan UNIT lines described on Pages 16 to 19 of Catalog No. 336. Your copy is waiting —ASK FOR IT!

KRAM-R-FIN
UNIT COOLERS

Available in 11 sizes with I.M.E. Capacities ranging from 5 to 175 pounds hourly. Priced from $60.00 to $250.00 list. C.F.M. Range from 125 to 1000.

Kramer Fan Units Now Available in 27 Models.

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210 West 65th, N.Y.C. TRENTON, N.J. 5114 Liberty Ave., Pittsburgh, Pa.

COPELAND

Copeland Refrigeration Corp., Detroit, Mich.

	436	736	936
Model No.	436	736	936
Compressor Model No.	C2-16	C2-16	C2-20
PRICE			
Retail price, installed	$119.50	$199.50	$249.50
Cabinet finish, exterior	Lacquer		
CABINET DIMENSIONS			
Overall height (inches)	54⅜	58	61½
Overall width (inches)	23⅞	30⅛	32⅞
Overall depth (inches)	23	26¾	26⅛
Inside height (inches)	26⅝	30	33½
Inside width (inches)	19½	23¾	26½
Inside depth (inches)	16¼	19⅛	18½
Number of doors	1		
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.5	7.10	9.01
Number of shelves	3	4	5
Total shelf area (sq. ft.)	8.5	14.0	17.4
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	2	3	3
Sides	2	3	3
Back	2	3	3
Door	2½	3	3
Bottom	2	3¼	3¼
ICE CUBES			
Number of shallow trays	3	2	2
Number of deep trays	0	2	1
Total number of cubes	63	98	126
Total weight of cubes (lbs.)	6	9	11
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	115	115	138
Motor horsepower	1/6	1/6	1/5
Refrigerant in system (lb.)	1	1	1
Quantity of lubricant (pt.)	7/8	7/8	7/8
Belt circumference (inches)			
Belt width (64ths of an inch)			
WEIGHT			
Net weight (lbs.)	280	335	370
Shipping weight (lbs.)			

COMPRESSOR
Made by Copeland, open, reciprocating, belt-driven compressor located below food compartment. Bellows shaft seal.
Compressor Model No. C2-16—twin cylinder, 420 r.p.m., 1¼-in. bore, 1⅛-in. stroke.
Compressor Model No. C2-20—twin cylinder, 490 r.p.m., 1¼-in. bore, 1⅛-in. stroke.
Refrigerant, methyl chloride. Lubricant, Suniso.

CABINET
Made by Truscon. Steel frame with Thermocraft insulation, Panelyte breaker strip, rubber gasket.

HARDWARE
Made by Grand Rapids Brass. Brass, chromium finish.

MOTOR
Capacitor-start type made by Delco and Emerson. Oil semi-annually.

CONDENSER
Made by Long Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR
Made by Mullins, of steel, dry expansion type evaporator.
Detroit Lubricator expansion valve refrigerant control.
Aluminum ice trays. Rubber tray in 736 and 936.

CONTROL
Cutler-Hammer and Penn adjustable temperature control Model No. ——— mounted inside the cabinet. Wide-cycle defrosting with vacation cycle. (Cutler-Hammer) hand reset solder pot, and (Penn) hand reset bimetal overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year warranty—four-year replacement contract.
Serviced by: Distributors and dealers.
Replacement parts are sold to independent service companies in some territories.

TRUSCON

Truscon Steel Co., Detroit, Mich.

	T-436	T-736	T-936
Model No.	T-436	T-736	T-936
Compressor Model No.	C2-16	C2-16	C2-20
PRICE			
Retail price, installed	$119.50	$199.50	$249.50
Cabinet finish, exterior	Lacquer		
CABINET DIMENSIONS			
Overall height (inches)	54⅜	58	61½
Overall width (inches)	23⅞	30⅛	32⅞
Overall depth (inches)	23	26¾	26⅛
Inside height (inches)	26⅝	30	33½
Inside width (inches)	19½	23¾	26½
Inside depth (inches)	16¼	19⅛	18½
Number of doors	1		
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.5	7.10	9.01
Number of shelves	3	4	5
Total shelf area (sq. ft.)	8.5	14.0	17.4
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	2	3	3
Sides	2	3	3
Back	2	3	3
Door	2½	3	3
Bottom	2	3¼	3¼
ICE CUBES			
Number of shallow trays	3	2	2
Number of deep trays	0	2	1
Total number of cubes	63	98	126
Total weight of cubes (lbs.)	6	9	11
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	115	115	138
Motor horsepower	1/6	1/6	1/5
Refrigerant in system (lb.)	1	1	1
Quantity of lubricant (pt.)	7/8	7/8	7/8
Belt circumference (inches)			
Belt width (64ths of an inch)			
WEIGHT			
Net weight (lbs.)	280	335	370
Shipping weight (lbs.)			

COMPRESSOR
Made by Copeland, open, reciprocating, belt-driven compressor located below food compartment. Bellows shaft seal.
Compressor Model No. C2-16—twin cylinder, 420 r.p.m., 1¼-in. bore, 1⅛-in. stroke.
Compressor Model No. C2-20—twin cylinder, 490 r.p.m., 1¼-in. bore, 1⅛-in. stroke.
Refrigerant, methyl chloride. Lubricant, Suniso.

CABINET
Made by Truscon. Steel frame with Thermocraft insulation, Panelyte breaker strip, rubber gasket.

HARDWARE
Made by Grand Rapids Brass. Brass, chromium finish.

MOTOR
Capacitor-start type made by Delco and Emerson. Oil semi-annually.

CONDENSER
Made by Long Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR
Made by Mullins, of steel, dry expansion type evaporator.
Detroit Lubricator expansion valve refrigerant control.
Aluminum ice trays. Rubber tray in T-736 and T-936.

CONTROL
Cutler-Hammer and Penn adjustable temperature control Model No. ——— mounted inside the cabinet. Wide-cycle defrosting with vacation cycle. (Cutler-Hammer) hand reset solder pot, and (Penn) hand reset bimetal overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year warranty—four-year replacement contract.
Serviced by: Distributors and dealers.
Replacement parts are sold to independent service companies in some territories.

COLDSPOT

Sears, Roebuck & Co., Chicago, Ill.

	7516	7517	7518	7519	7520	7521
Model No.	7516	7517	7518	7519	7520	7521
Compressor Model No.	T5	W6	Y6	Y6	Z6	Z6
PRICE	Chicago prices					
Retail price, installed	$ 94.50	$124.50	$149.50	$169.50	$169.50	$189.50
Cabinet finish, exterior	Synthetic Enamel			Porc.	S. Enam.	Porc.
CABINET DIMENSIONS						
Overall height (inches)	51¼	57⅜	59¼	59¼	63⅞	63⅞
Overall width (inches)	24⅜	30	30	30	33⅝	33⅝
Overall depth (inches)	23¾	25	28⅞	28⅞	28⅞	28⅞
Inside height (inches)	27¼	31¾	31⅞	31⅞	36½	36½
Inside width (inches)	19½	23⅝	23⅝	23⅝	27¼	27¼
Inside depth (inches)	15	15½	15⅝	15⅝	15⅝	15⅝
Number of doors	1					
STORAGE CAPACITY						
Net food storage (cu. ft.)	4.24	6.30	6.31	6.31	8.33	8.33
Number of shelves	3	4	5	5	6	6
Total shelf area (sq. ft.)	9.24	12.19	13.04	13.04	18.08	18.08
Cabinet finish (interior)	Porcelain					
INSULATION						
Top (thickness in inches)	2½	3	3	3	3	3
Sides	2	3	3	3	3	3
Back	2	3	3	3	3	3
Door	2	3	3½	3½	3½	3½
Bottom	2	3	3	3	3	3
ICE CUBES						
Number of shallow trays	2	3	4	4	4	4
Number of deep trays	0	0	1	1	1	1
Total number of cubes	64	96	105	105	138	138
Total weight of cubes (lbs.)	5	7½	8	8	11	11
COMPRESSOR						
Ice melting effect 24 hrs.	120	120	150	150	180	180
Motor horsepower	1/6	1/6	1/5	1/5	1/4	1/4
Refrigerant in system (lbs.)	Less than 2 lbs.					
Quantity of lubricant (pt.)	3/4	3/4	3/4	3/4	3/4	3/4
Belt circumference	No belts					
Belt width	No belts					
WEIGHT						
Net weight (lbs.)	228	298	340	358	375	405
Shipping weight (lbs.)						

COMPRESSOR
Made by Sunbeam Electric Mfg. Co., open, rotary, direct-driven compressor located above food compartment. Shaft seal, bellows.
Refrigerant, sulphur dioxide. Lubricant, Argon ice machine oil.

CABINET
Made by ———. Wood frame with Balsam Wool (7516) and Dry Zero (all others) insulation, Tylac (7516) and bakelite (all others) breaker strip, rubber gasket.

HARDWARE
Made by National Lock. Brass with chrome-plated finish.

MOTOR
Single-phase condenser type made by G-E and Delco. Oil every six months.

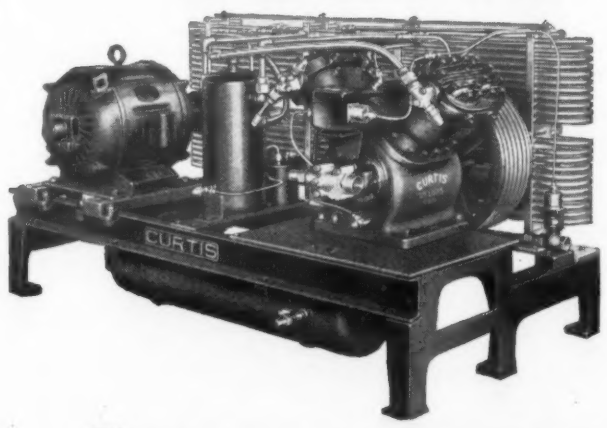
CONDENSER
Made by Bush and McCord, fan cooled, fin and tube condenser.

EVAPORATOR
Made by Sunbeam, copper and brass shell type (tubing soldered to shell).
Detroit Lubricator expansion valve refrigerant control.
Anodic aluminum ice trays with trigger release.

CONTROL
General Electric adjustable temperature control mounted inside cabinet.
Control Model No. G226 (7516 and 7517), manual defrosting with vacation cycle.
Control model No. G53 (7518 and 7519) and G54 (7520 and 7521) have semi-automatic defrosting with vacation cycle.
Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: Five years.
Serviced by: Sears, Roebuck & Co.
Replacement parts are not sold to independent service companies.

ONLY **CURTIS** CAN GIVE YOU



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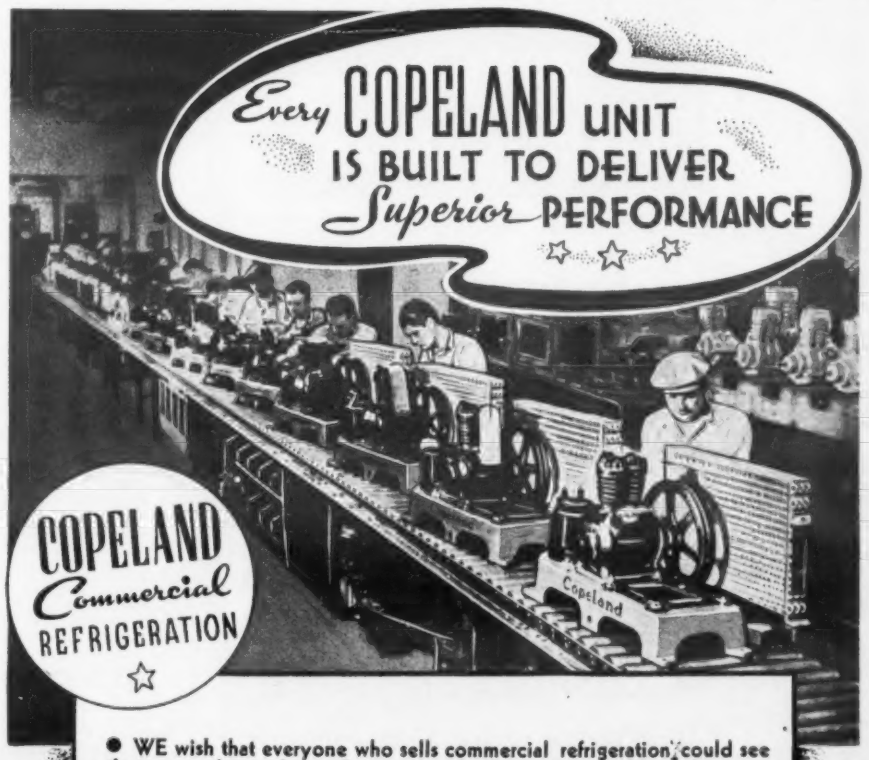

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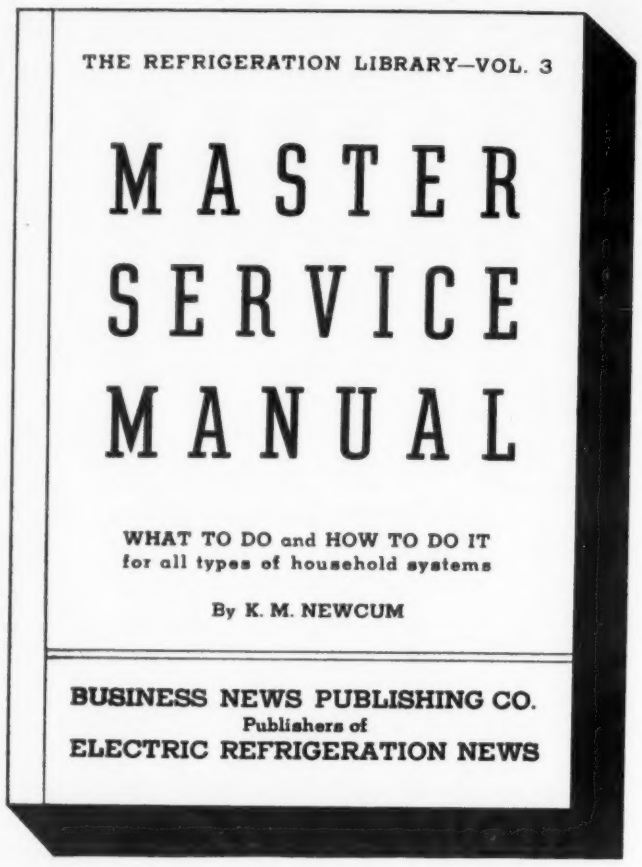
THE MASTER SERVICE MANUAL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for all types of household systems
By K. M. NEWCUM
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A practical guide for the experienced serviceman. A textbook for the beginner. Authentic information. Clear explanations. Non-technical instructions. Detailed indexing. Special information on 15 orphan makes.

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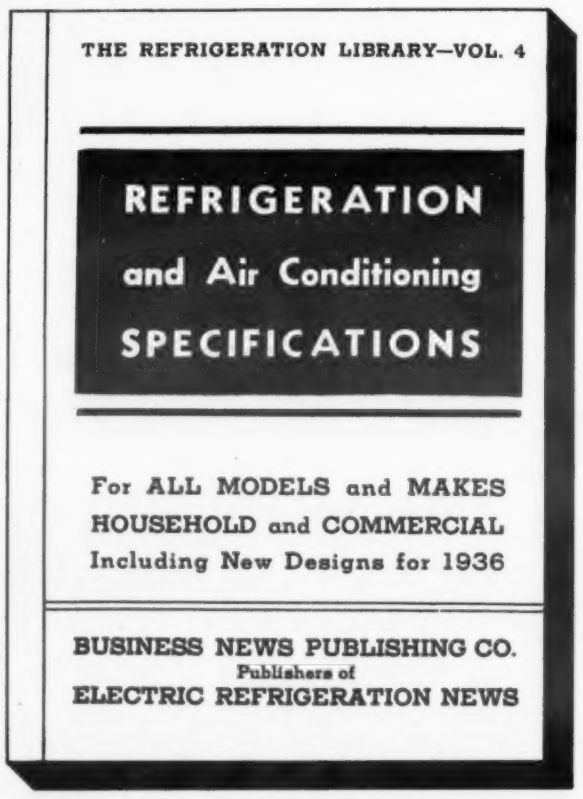

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Los Angeles, Calif.

J. Russell Hancock, Ltd.
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ELECTRIC REFRIGERATION NEWS

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MAY 20 - 25c per copy

BUSINESS NEWS PUBLISHING CO.

5229 Cass Ave. Detroit, Mich.

STARR-FREEZE

The Starr Co., Richmond, Ind.

Model No.	T	R	N	Q	G	H
Compressor Model No.	AT	AR	J3	J7	B0	B3
PRICE						
Retail price, installed	Prices quoted only to the trade					
Cabinet finish, exterior	Enamel or Porcelain					
CABINET DIMENSIONS						
Overall width (inches)	50¾	55¾	58⅝	57½	67	67½
Overall width (inches)	20½	24⅝	33	37⅛	49½	49½
Overall depth (inches)	20	22⅝	26⅝	24	26	25½
Inside height (inches)	25⅜	27½	29½	30	35	52½
Inside width (inches)	15½	19¾	25¼	31	42½	42½
Inside depth (inches)	13⅝	16⅛	16¼	19¼	16½	16½
Number of doors	1	1	1	2	2	4
STORAGE CAPACITY						
Net food storage (cu. ft.)	2.85	4	6.1	7.8	12.1	16
Number of shelves	3	5	5	6	6	7
Total shelf area (sq. ft.)	4.4	9	13	11.75	20.75	28.16
Cabinet finish (interior)	Porcelain					
INSULATION						
Top (thickness in inches)	2	3	3	3⅜	3⅛	3⅛
Sides	2	2¼	3	3⅜	3⅛	3⅛
Back	2	2¼	3	3⅜	3⅛	3⅛
Door	2	2¼	3	3⅜	3⅛	3⅛
Bottom	2	2¼	3	3⅜	3⅛	4
ICE CUBES						
Number of shallow trays	2	2	4	3	6	10
Number of deep trays	0	0	0	1	1	2
Total number of cubes	30	56	112	140	224	336
Total weight of cubes (lbs.)	2.6	3.9	10	12.5	20	30
COMPRESSOR						
Ice melting effect 24 hrs.	91	91	154	185	255	302
Motor horsepower	1/8	1/6	1/6	1/6	1/4	1/3
Refrigerant in system (lbs.)	2	2½	1½	1½	3½	3½
Quantity of lubricant (pts.)	15	15	10	10	22	22
Belt circumference (inches)	35	40	40	40	40	40
Belt width (64ths of an inch)	44					
WEIGHT						
Net weight (lbs.)	200	265	370	446	608	620
Shipping weight (lbs.)						

COMPRESSOR

Made by Starr, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model Nos. AT and AR—single cylinder, 300 r.p.m., 1.64-in. bore, 1.625-in. stroke.

Compressor Model No. J3—twin cylinder, 500 r.p.m., 1⅛-in. bore, 1¼-in. stroke.

Compressor Model No. J7—twin cylinder, 600 r.p.m., 1⅛-in bore, 1¼-in. stroke.

Compressor Model No. B0—twin cylinder, 300 r.p.m., 1.64-in. bore, 1.625-in. stroke.

Compressor Model No. B3—twin cylinder, 400 r.p.m., 1.64-in. bore, 1.625-in. stroke.

Refrigerant, SO_2 in AT and AR; CH_3Cl in J3, J7, B0, and B3.

Lubricant, special white refrigerant oil (115 vis.) Shaft seal, bellows.

CABINET

Made by Starr. Wood frame with Zilem slabs, hydrolene sealed, insulation, black walnut breaker strip, air-cushion rubber gasket.

HARDWARE

Made by Grand Rapids Brass and Winters & Crampton. Chrome finish.

MOTOR

Condenser type in models T, R, N, and Q; repulsion-induction type in G and H, made by Leland. Oil every four months.

CONDENSER

Made by Starr, fan cooled, finned tube condenser.

EVAPORATOR

Starr coiled copper tubes. Detroit Lubricator expansion valve refrigerant control.

Aluminum ice trays.

CONTROL

Cutler-Hammer adjustable temperature control, Model 9503, mounted inside the cabinet. Semi-automatic defrosting. Auto reset bimetal overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year.

Serviced by: Jobber or dealer.

Replacement parts are sold to independent service companies.

FEDERAL

Federal Refrigerator Corp., 57 E. 25th St., New York City.

(Specifications of Federal Refrigerator Corp. are incomplete because this company did not receive a questionnaire—the editors not knowing they were building a line this year—but hearing about the April 22 issue, sent in their own specifications sheet.)

Model No.	4-S	6-S	66-S	91-S
Compressor Model No.	RU-3	RU-3	RU-4	RU-4
Cabinet finish (exterior)	Dulux			
CABINET DIMENSIONS				
Overall height (inches)	53½	58¾	65	70¾
Overall width (inches)	23⅞	30	30½	33½
Overall depth (inches)	21½	24½	24	24
Number of doors	1			
STORAGE CAPACITY				
Net food storage (cu. ft.)	4.1	6.5	6.96	9.1
Number of shelves	4	6	6	6
Total shelf area (sq. ft.)	8.5	13.03	12.73	15.38
Cabinet finish (interior)	Porcelain			
COMPRESSOR				
Ice melting effect 24 hrs. (lbs.)	105	105	145	145
Motor horsepower	1/6	1/6	1/5	1/5
Refrigerant in system (oz.)	24			

COMPRESSOR

Made by Jomoco, Inc., open, reciprocating, belt-driven compressor located below food compartment. Refrigerant, sulphur dioxide.

Compressor Model No. RU-3—single cylinder, 490 r.p.m., 1½-in. bore, $1\frac{7}{16}$-in. stroke.

Compressor Model No. RU-4—twin cylinder, 350 r.p.m., 1½-in. bore, $1\frac{7}{16}$-in. stroke.

CABINET

Made by Seeger Refrigerator Co. Bakelite breaker strip, rubber gasket.

HARDWARE

Made of brass with chrome finish.

MOTOR

Capacitor type made by General Electric. Oil semi-annually.

CONDENSER

Made by Bush, fan cooled, finned tube condenser.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year.

SPECIAL FEATURES

Models 4-S and 6-S—glass chiltray. Models 66-S and 91-S—glass chiltray, drawer-type hydrator and utility basket, dry-storage drawer, electric light.

Production Capacity of Duraloy Plant Reaches 20,000 a Day

DETROIT—Plant capacity of 20,000 pounds of "Duraloy" breaker strips per day has been realized at the plant of Detroit Paper Products Corp. here through the installation, some months ago, of a new 1,750 ton press, declares A. J. Norton, sales manager of the company.

The plant is now operating 24 hours a day, seven days a week, says Mr. Norton.

Impregnanted paper and phenolic resin, in the proportions of 50% each by weight, are used to make "Duraloy" breaker strips. In the manufacturing process 14 sheets of such material are pressed together under heat and pressure; the sheets melt, flow together, and set.

Breaker strips are completely fabricated at the plant, says Mr. Norton, being edged to the proper radius, mitered to the proper size, and screw-holes drilled to meet the manufacturer's specifications.

FHA Administrator Predicts 250,000 New Houses in U. S. This Year

WASHINGTON, D. C.—Residential construction in the United States during 1936 will total 250,000 houses and other residential units, Stewart McDonald, Federal Housing Administrator, has estimated, following a re-survey of the home building situation throughout the nation.

In the previous announcement, Mr. McDonald predicted that 175,000 homes would be built in the United States this year. This estimate represented a total double that of 1935, in which 85,000 houses were built, according to Housing Administration estimates based on reports of the Bureau of Labor Statistics.

"Building activity for the first two months of the year," Mr. McDonald said, "clearly points to a higher volume of residential building than we formerly expected. Judged on our performance of last year, we felt that residential building this year would reach 175,000 homes.

"Today the picture is changing and I am confident that 250,000 new homes in 1936 are not too much to expect. January and February building operations are in line with this estimate, and our newest survey incates that no time will be lost in getting strong building movement under way this Spring."

Federal Housing Administration figures show that as of March 7, home mortgages accepted for insurance reached a total of $44,975,965 thus far in 1936. Total figures for January, February, and March, 1935, were $7,070,013.

The 1936 figures, however, provide no adequate comparison with those of the previous year, since up to April, 1935, the Mutual Mortgage Insurance Plan operation was generally inoperative because of state laws which since have been amended.

Monthly totals for January and February are only comparatively little below the figures for the fall of 1935, when building in this country reached the highest point since 1931, Mr. McDonald said. The first two months of 1936 average higher than the summer months of last year.

EXTRA DRY
ESOTOO
VIRGINIA SMELTING
VIRGINIA SMELTING CO. WEST NORFOLK, VA.
Makes the servicing of home refrigerators easier, safer, surer
ESOTOO — liquid sulphur dioxide — contains less than 0.0030% moisture!
Supplied in various sized cylinders — particularly convenient for servicing domestic electric refrigerators.
ESOTOO — made by our patented process as pure, reliable, and uniform as highest technical skill and painstaking care can achieve. The name EXTRA DRY ESOTOO on a cylinder means that the refrigerant has been checked thorougly by skilled technicians before shipment. 69 distributing points for prompt delivery to you.
V-METH-L (Virginia Methyl Chloride) made with the same care and scientific precision.
This coupon will bring you informative literature. Why not mail it today?
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131 State Street, Boston
Send me literature I have checked. I am interested in receiving any additional literature on Electrical Refrigeration you may issue from time to time.
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Folder: V-METH-L (Virginia Methyl Chloride)
Folder: Transferring from large to small cylinders
Circular: Physical properties of various refrigerants
Name.....
Address.....
City.....State.....
VIRGINIA SMELTING CO.
West Norfolk, Virginia

Jobber Activities

By H. W. Small

Jobbermania is sweeping the country in a manner reminiscent of the flu epidemic in 1918. No definition of this condition can be found in the Pharmacopia, but its symptoms can be readily recognized by the patient's rabid enthusiasm for entering the business of jobbing refrigeration parts and supplies. It is extremely contagious and has been spread by word of mouth and personal contact as well as by auto-intoxication.

Perhaps the greatest source of infection has been the manufacturers of refrigeration supplies and parts whose representatives have found the business man very susceptible. Current figures are not available, but auto-intoxication may be of equal importance. No particular class of business man appears to be predominately susceptible, and no particular class appears to be immune.

Available statistics shows that infection has occured in the cases of men in such widely varying enterprises as the sale of bathtubs, drill presses, automobile parts, oil burner parts, horseshoes, and confectioners syrups. The mortality rate is low at present, but this is usually true during the infectious period of most ailments.

As infection spreads and the after effects are met, the rate is bound to increase. To those who are in the early stages of this infection, and while it can still be cured, it would be well to hesitate and give thought to its more serious consequences.

Not the Road to Easy Wealth

The refrigeration parts jobbing business is *not* the road to easy wealth. It is highly technical and consequently needs technical administration of sales and purchases. This means a relatively high overhead when compared to many lines of merchandise. The jobbers gross margin of profit is no more, and in many cases less than these standard merchandise lines.

Competition is keen, and it is intelligent, particularly from the established firms . The jobber has four main sources of competition. The aggregate capital of his competitors excluding his own jobbing associates is 200 times greater than the combined capital of himself and his associates.

He will find that his jobber associates, the manufacturer of parts and supplies, the manufacturer of refrigerating machines and the mail order supply houses are after the same dollar he is. It is weil worth repeating that he will find a very worthy antagonist in every one.

Stock Turnover a Serious Problem

The turnover in the jobbing business is not great when the total investment is considered. Certain numbers are fast movers, but other cannot be turned even one a year. Owing to this, a good volume must be obtained or the slower numbers eliminated. This means a poorstock and the consequent loss of a sale or customer to some competitor. When slow numbers are carried, but not sold, they become obsolete.

Changes are occurring so rapidly that this is a serious problem. If we were to assume that the jobbers investment could be turned three times a year a $20,000 stock would mean $60,000 in gross sales. After deducting the expenses from a gross profit of ten or twelve thousand dollars, no one will retire much before the grave.

There are few businesses that succeed when operated as a side line. This would appear doubly certain when the business is as technical as the refrigeration business.

Minimum Requirements for Success as a Jobber

To those who would enter this business, and who seriously contemplate making it a success, it would be well to study the minimum requirements which would be necessary under most circumstances.

1. Provide yourself with adequate capital. This is fundamental in any business.
2. Provide for competent technical experience.
3. Recognize your competitors and follow the lead of the most financially successful.
4. Be satisfied with such business as may be secured at a profit.
5. Associate yourself with your competitors and work with them to eliminate such evils as are within your power.
6. Keep informed on the progress of the industry (read ELECTRIC REFRIGERATION NEWS).
7. Work 16 hours a day.
8. Keep adequate stock of merchandise.
9. Follow all fundamental rules for success in business.

The National Refrigeration Supply Jobbers Association will welcome into their membership all bona fide jobbers as described in their constitution and by-laws. To those desiring further information, communications can be addressed to Frank J. Gleason, executive secretary, 2707 David Stott Bldg., Detroit, Mich.

Personal Notes About Jobbers and Suppliers

H. A. Dessau, our good looking director has gone to Europe. Perhaps when the Great Lakes Canal is completed we can export from the middlewest.

Bob Spangler has opened a store in New Orleans.

Joe Oberc has moved to new and larger quarters in Detroit.

Dan Wile is a proud father, and is traveling over the country to spread the good news by word of mouth.

Irv. Knudson and Spike Thorndike are well on their way to a better and more abundant life. Perhaps a happier one as well. Our latest bulletins indicate 100% success to date. To fall by the wayside may be expensive to one of them. Up to date information will be appreciated.

Frank Gleason must have a dozen stenographers to write his letters. It takes the full time of one to reply to just those we get.

H. S. McCloud (Mac) was asked to name his pet hobby. His serious reply was that it used to be golf. A lot of us are in the same boat.

Report says that at a recent directors meeting when a membership application was rejected it took more than water to revive Jack Collyer.

Contributions to this column are welcomed and should be addressed to H. W. Small, 2490 University Ave., St. Paul, Minn.

First-Year Dealer Sells 207 Units

ROCKFORD, Ill.—Proof that a sizable refrigeration business can be built up in a short time can be found in the record of the Car-Pet-Line Store here, where, during nine months in 1935 when the store carried Kelvinator refrigerators, 207 were sold.

Up to March, 1935, the store had never handled any electric appliance. at this time, Laurel E. Carlstrom, president, and Richard W. Denmore, sales manager, signed to handle the Kelvinator line, and established an electric refrigeration department in the store's basement.

When the sales on their new merchandise mounted steadily, the store owner decided to move the new department to the second floor of the building. Now the refrigeration display centers around a model kitchen.

Chief promotional feature used by the store to promote its refrigeration sales is a daily radio program.

Highly influential in building up the 1935 sales volume, was the store's use of the Meter-ator selling plan.

HOSTESS

Hostess Corp., 101 Hanson St., Toronto, Ont., Canada.

Model No.	406	506	606	706	516
Compressor Model No.	Open	Sealed			
PRICE	Canada Prices Zone 1				
Retail price, installed	$179.00	$199.00	$239.00	$269.00	$219.00
Cabinet finish, exterior	Porcelite (Lacquer)				
CABINET DIMENSIONS					
Overall height (inches)	50¾	50¾	54	57½	54¾
Overall width (inches)	25¾	25¾	28	29⅞	29¼
Overall depth (inches)	25⅜	25¾	26¼	27	25⅜
Inside height (inches)	26⅛	26⅛	30	31¾	26¼
Inside width (inches)	19¾	19¾	21⅝	23	22¾
Inside depth (inches)	18¼	18¼	18⅜	19⅛	17
Number of doors	1				
STORAGE CAPACITY					
Net food storage (cu. ft.)	4.5	4.5	5.5	6.5	5.0
Number of shelves	4	4	4	4	4
Total shelf area (sq. ft.)	9.0	9.5	10.8	12.0	10.0
Cabinet finish (interior)	Porcelain				
INSULATION					
Top (thickness in inches)	2¾	2¾	3⅛	3⅛	3⅛
Sides	2¾	2¾	3	3⅜	3
Back	2¾	2¾	3	3⅜	3
Door	2½	2½	2⅝	3	2⅝
Bottom	3½	3½	3½	4	3½
ICE CUBES					
Number of shallow trays	1	1	1	2	1
Number of deep trays	1				
Total number of cubes	63	63	63	84	63
Total weight of cubes (lbs.)	4½	4½	4½	6	4½
COMPRESSOR					
Ice melting effect 24 hrs. (lbs)	100				
Motor horsepower	1/6	1/6	1/6	1/6	1/6
Refrigerant in system (lbs.)	3¾				
Quantity of lubricant (Imp. gals.)	1/3				
Belt circumference (inches)	No belts				
Belt width (64ths of an inch)	No belts				
WEIGHT					
Net weight (lbs.)	400	400	430	475	420
Shipping weight (lbs.)					

COMPRESSOR

Made by Hostess, 1725 r.p.m., sealed, rotary, direct-driven compressor located below food compartment. Compressor on model 406 is open model.

Refrigerant, sulphur dioxide. Lubricant, Sun Oil Co.

Shaft seal, none on sealed unit, double seal on open model.

CABINET

Made by Hostess. Hardwood frame with "Hostex" insulation, Tylac breaker strip, balloon type rubber gasket.

HARDWARE

Made by Winters & Crampton. Chromium-plated finish.

MOTOR

Capacitor type, made by General Electric. Permanently oiled (except Model 406, which should be oiled semi-annually.)

CONDENSER

Made by Hostess, natural draft cooled, fin and tube condenser.

EVAPORATOR

Made by Hostess, copper (electro-tin plated) fin type.

Float valve refrigerant control, Hostess expansion valve.

Aluminum ice trays. Automatic tray release and rubber tray (except 406.)

CONTROL

Cutler-Hammer adjustable temperature control. Model 9502 Type G, mounted inside cabinet. Automatic defrosting on all but Model 406. Hand reset bimetal overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Three years on hermetic unit, including evaporator (control excepted.)

Serviced by: Hostess.

Replacement parts are not sold to independent service companies.

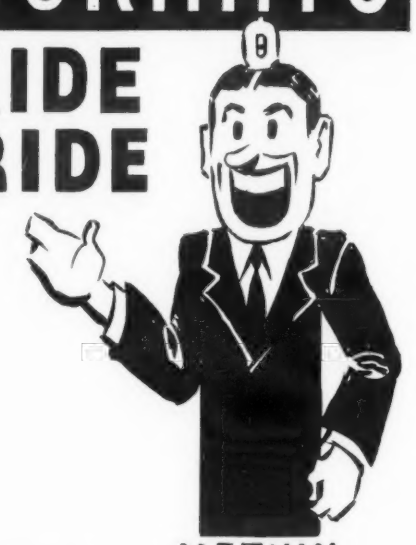
SPECIAL FEATURES

Controlled humidity, Servador, and interior electric light in all except No. 406.

ANSUL REFRIGERANTS

SULPHUR DIOXIDE
METHYL CHLORIDE

ONE OF OUR 80 DISTRIBUTORS AND JOBBERS IS LOCATED NEAR YOU



SULPHUR DIOXIDE

METHYL CHLORIDE

Albany, N. Y.: Albany Garage (Kelvinator Dept.)
Allentown, Pa.: General Refrigeration Supply Co.
Atlanta, Ga.: M. & M. Warehouse Co.
Augusta, Ga.: Augusta Cream Sizing Co.
Baltimore, Md.: Parks & Hull Appliance Co.
Binghamton, N. Y.: Service Supply Co.
Birmingham, Ala.: Wittichen Transfer & Warehouse Co.
Boston, Mass.: Melchior, Armstrong, Dessau, Inc.
Bridgeport, Conn.: Parsons Bros.
Brooklyn, N. Y.: Coleman Electric Supply Co., Inc.
Buffalo, N. Y.: Chemical Sales Corp. Root, Neal & Co.
Burlington, Iowa: McKesson-Churchill
Cedar Rapids, Iowa: Thompson-Hayward Chemical Co.
Charleston, S. C.: Charleston Warehouse & Forwarding Co.
Charleston, W. Va.: B. Priesser Co., Inc.
Charlotte, N. C.: Refrigeration Service Co.
Chicago, Ill.: Thompson-Hayward Chemical Co.
*Grasselli Chemical Co.
Standard Refrigeration Parts Co.
Airo Supply Co.
H. W. Blythe Co.
H. Channon Co.
George Monjian Co.
Borg Warner Service Parts Co.
Cincinnati, Ohio: *Merkel Brothers Co.
Cleveland, Ohio: *Grasselli Chemical Co.
Williams and Co.
Davenport, Iowa: Thompson-Hayward Chemical Co.
Denver, Colo.: Thompson-Hayward Chemical Co.
Des Moines, Iowa: Thompson-Hayward Chemical Co.
El Paso, Tex.: Mine & Smelter Supply Co.
Fort Wayne, Ind.: Protective Electrical Supply Co.
Harrisburg, Pa.: Melchior, Armstrong, Dessau Co.
Hempstead, L. I., N. Y.: Home Oil Burner Corp
Houston, Texas: Thompson-Hayward Chemical Co.
Indianapolis, Ind.: Refrigeration Service Co.
Jacksonville, Fla.: Refrigeration Service & Supply, Inc.
Jersey City, N. J.: Lackawanna Terminal Warehouses, Inc.
Kansas City, Mo.: Burstein-Applebee Co.
Thompson-Hayward Chemical Co.
Knoxville, Tenn.: Chapman Drug Co.
Lincoln, Neb.: Ruegg Refrigeration Sales Co.
Louisville, Ky.: Geo. Dehler Jr. & Co.
Los Angeles, Cal.: S. L. Abbott, Jr., Co.
Macon, Georgia: Washburn Bonded Warehouse
Marinette, Wis.: Ansul Chemical Co.
Memphis, Tenn.: Thompson-Hayward Chemical Co.
Miami, Fla.: Miami Appliance Co.
Milwaukee, Wis.: Wm. Hyink & Sons Co.
Minneapolis, Minn.: Refrigeration & Industrial Supply Co.
Thompson-Hayward Chemical Co.
Mobile, Ala.: Marine Specialty Co.
Montreal, Que.: *Canadian Industries, Ltd.
New Orleans, La.: Thompson-Hayward Chemical Co.
New York, N. Y.: Aetna Supply Co.
Lackawanna Terminal Warehouses, Inc.
Melchior, Armstrong, Dessau Co.
Paramount Electrical Supply Co., Inc.
Servicemens Supply Co.
Newark, N. J.: McIntyre Connector Co.
Oklahoma City, Okla.: Midvale Industrial Chemical Corp.
Thompson-Hayward Chemical Co.
Omaha, Neb.: Thompson-Hayward Chemical Co.
Paoli, Pa.: Ansul Chemical Co.
Paterson, N. J.: White & Shauger, Inc.
Philadelphia, Pa.: Bailey Warehouses
Melchior, Armstrong, Dessau Co.
Victor Sales Co.
Pittsburgh, Pa.: Fort Pitt Chemical Co.
Williams and Co.
Portland, Ore.: Van Waters & Rogers, Inc.
Richmond, Va.: Refrigeration Supply Co.
Roanoke, Va.: Whitescarver, Inc.
Rochester, N. Y.: Ontario Metal Supply Co.
Melchior, Armstrong, Dessau Co.
San Antonio, Tex.: Thompson-Hayward Chemical Co.
Westbrook Carburetor Electrical Co.
San Juan, P. R.: Refrigeration Supply Co.
Savannah, Ga.: Savannah Bonded Warehouse & Transfer Co.
Seattle, Wash.: Van Waters & Rogers, Inc.
Sioux City, Iowa: Refrigeration Supply Co.
Springfield, Ill.: United States Electric Co.
St. Paul, Minn.: Thermal Service Co., Inc.
St. Louis, Mo.: Thompson-Hayward Chemical Co.
Carl Schneider Co.
Syracuse, N. Y.: Syracuse Supply Co.
Vancouver, B. C.: *Canadian Industries, Ltd.
Waterloo, Iowa: Winterbottom Supply Co.
Wilkes Barre, Pa.: Radio Service Co.
Winnepeg, Man.: *Canadian Industries, Ltd.
Wichita, Kan.: Thompson-Hayward Chemical Co.
*Distributor Ansul Sulphur Dioxide Only.

ANSUL CHEMICAL COMPANY · MARINETTE · WIS.

Health Story Strong Selling Point with Police, Dealer Finds

TOLEDO—Working on the theory that with protectors of public safety, the best basis for selling electric refrigeration is its health-guarding qualities, A. C. "Tex" Sizemore, retail sales manager of the Electric Range & Equipment Co., Leonard dealer here, sold refrigerators to 140 of Toledo's 375 policemen.

Thinking in terms of his prospect's attitude, Sizemore perceived the logical appeal of the safety factor in selling to policemen. He reasoned also, that policemen should be good prospects because they get good salaries, as average salaries go.

With these points for a beginning, he worked out a sales talk in which he emphasized the fact that protection from sickness and disease caused by spoiled foods resulting from incorrect refrigeration temperatures was as important as is protection against a "public enemy." Then he turned his attention to the police force, and sold Leonard refrigerators to 37% of its members.

Gibson Gets 5-Carload West Coast Order

GREENVILLE, Mich. — Fey and Krause, Gibson distributor in Los Angeles territory, recently placed a five-carload order for immediate shipment, reports L. E. Taufenbach, sales manager of Gibson Electric Refrigerator Corp.

Orders for Gibson electric refrigerators in April will be double those of April, 1935, and export shipments are twice what they were at this time last year, Mr. Taufenbach says.

Salesman Obtains Order For $1,300 Kitchen from An Unpromising Lead

CLEVELAND — E. J. Wintering, salesman for Electrical Housekeeping, Inc., G-E distributor here, is convinced that prospects for all-electric kitchens can be found everywhere—since he followed a seemingly unpromising lead and came back with a $1,300 cash order for kitchen appliances.

The prospect telephoned Salesman Wintering twice before he got around to making a call. When he checked the address before leaving the office, he found that the house he was going to was located near the Erie railroad roundhouse—and he didn't expect to make a sale.

When he arrived at the house, Wintering found that the prospect already had a G-E refrigerator, and wanted a completely remodeled all-electric kitchen. So Salesman Wintering took the order, received $1,300 in cash, and the prospect's old-fashioned kitchen was remodeled and equipped with G-E kitchen equipment, modern lighting, and floor covering.

Jersey League Launches Drive with Show

CAMDEN, N. J.—To give impetus to a sales drive which has as its goal the sale of 7,000 electric refrigerators during 1936, the Electrical League of South Jersey is holding its Sixth Annual Spring refrigeration show here April 1 to 4 inclusive.

Sales made by League members during 1935 totaled 6,850 units, representing a dollar volume of approximately $1,350,000, according to Isador Borstein, chairman of the group's refrigeration board.

Bridgeport Utility Backs Dealer Offer Of 'Lifetime' Service

NEW HAVEN, Conn.—Cooperating with independent dealers in this city and Bridgeport, United Illuminating Co., utility, has launched a spring campaign on domestic refrigeration featuring a "lifetime guarantee" service agreement. Two-page spreads were used in newspapers of both cities to announce the service policy.

Fifteen New Haven dealers, members of the New Haven Electrical Refrigerator Dealers' Association, are participating with the utility in the drive here, while 21 cooperating outlets are listed in Bridgeport. These dealers have subscribed to a code of ethics and have arranged with the utility to have refrigerator time payments carried on consumers' light bills.

The service policy is as follows: "United Illuminating Co. will guarantee to the original purchaser of a new electric refrigerator purchased... (from a listed dealer)..... and registered with it, that he will receive service (after the expiration of the free service guarantee) on a fair and reasonable basis from the dealer during the life of the refrigerator. In the event that this dealer, for any reason, should be unable to render such service, United Illuminating Co. will make necessary arrangements for continuing this service on a fair and reasonable basis."

United Illuminating Co. began merchandising refrigerators and other major appliances last year, with A. W. Chase, long connected with the Connecticut distributorship for Westinghouse refrigerators, as sales manager. The utility-dealer set-up on electrical appliances has been developed by Mr. Chase.

Richardson to Head Sales for Taylor Co.

MILWAUKEE—Howard E. Richardson, formerly general sales manager of the Crosley Radio Corp., has been elected vice president and a director of the Taylor Electric Co., distributor of Leonard refrigerators and RCA Victor radios in the state of Wisconsin, John A. Taylor, president of the distributorship, announced last week.

Mr. Richardson resigned from the Crosley Corp. in March, after two and a half years as its general sales manager. Previous to joining the Crosley organization, he was an electric appliance distributor. In his new position, Mr. Richardson will be in charge of sales for the Taylor Co.

Daily Speaks at Cleveland Commercial Meeting

CLEVELAND—Walter J. Daily, head of the Walter J. Daily advertising agency, and formerly national sales promotion manager of the refrigeration department of General Electric Co., was principal speaker at the first meeting of the commercial electric refrigeration group of this city, which was held at the University club here recently.

Arrangements for the meeting, which was attended by representatives of distributor and dealer companies handling commercial equipment in this territory, were made by J. H. Penske, Jr., of Williams & Co.

Wanamaker Forms Agency

CHICAGO—Duane Wanamaker, former advertising director for General Household Utilities Co., has formed his own advertising agency with headquarters at 141 West Ohio St., here.

Veteran Users Help G-E Dealer Palmer To Boost Sales

WEST CHESTER, Pa.—How an electric refrigerator dealer in a small town can effectively use information obtained from veteran "users" in boosting his sales, has been demonstrated by the George J. Palmer Co., General Electric dealer in this town.

Working on the idea that it was easier to close sales when the salesman could point to a satisfied refrigerator user whom the prospect knew, the dealer sent a form questionaire and a personal letter to each of the 79 "users" who had purchased refrigerators during 1928, the first year that the company had handled the G-E line.

In the questionnaire, the user was asked how many times the refrigerator had been out of service, the number of service calls made during this period, the monthly current charge for operating the appliance, and similar questions. Frank answers were requested, and the letter asked permission to use the user's name in making other sales.

Replies were received from 52 users. Each of the answers stated that the refrigerators purchased in 1928 were still being used. Service charges for the 52 refrigerators amounted to $21.25.

A summary of this information was placed upon a placard in the dealer's show room window. It was played up in the advertisements run in the local newspaper, and the salesmen referred to the users' statements in their sales talks.

"The plan sold a large number of refrigerators for us," the dealer states. "We found that our salesmen had to make fewer follow-up calls, for prospects were being sold on the floor."

GAFFERS & SATTLER

Gaffers & Sattler, Los Angeles, Calif.

Model No.	50	60	65	70	80
Compressor Model No.	T	T	T	T	T
PRICE					
Retail price, installed	$144.50	$174.50	$199.50	$224.50	$249.50
Cabinet finish, exterior	Lacquer				
CABINET DIMENSIONS					
Overall height (inches)	56¾	58	56½	62⅜	66⅞
Overall width (inches)	24¾	27⅜	26½	31⅛	31⅛
Overall depth (inches)	23½	23½	23	23½	23½
Inside height (inches)	25⅛	27⅛	27	31	35⅜
Inside width (inches)	18¼	21	21	23¾	23¾
Inside depth (inches)	16½	16½	18	16½	16½
Number of doors	1				
STORAGE CAPACITY					
Net food storage (cu. ft.)	4	5	5.4	6.5	7.5
Number of shelves	3	6	4	5	7
Total shelf area (sq. ft.)	7.8	10.6	10.0	13.4	15.3
Cabinet finish (interior)	Porcelain				
INSULATION					
Top (thickness in inches)	3	3½	2½	3½	3½
Sides	3	3	2½	3½	3½
Back	3¼	3¼	2½	3¼	3¼
Door	3½				
Bottom	3	3½	2½	4	4
ICE CUBES					
Number of shallow trays	2	3	3	3	4
Number of deep trays	0	Furnished when specified			
Total number of cubes	56	84	84	84	112
Total weight of cubes (lbs.)	4	6	6	6	8
COMPRESSOR					
Ice melting effect 24 hrs. (lbs.)	130				
Motor horsepower	1/6				
Refrigerant in system (lbs.)	4½				
Quantity of lubricant (pts.)	1				
Belt circumference (inches)					
Belt width (64ths of an inch)	34				
WEIGHT					
Net weight (lbs.)	385	430	400	485	525
Shipping weight (lbs.)					

COMPRESSOR
Made by Gaffers & Sattler, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, diaphragm type.
Compressor Model T—twin cylinder, 320 r.p.m., 1½-in bore, 1⅜-in stroke.
Refrigerant, sulphur dioxide. Lubricant, Sun Oil No. 2.

CABINET
Made by Gaffers & Sattler. Spruce frame with Zerocel (mineral wool) insulation. Odorless Bakelite breaker strip, Goodrich balloon-type rubber gasket.

HARDWARE
Made by National Lock and Winters & Crampton. Brass, chrome-plated finish.

MOTOR
Capacitor-type made by General Electric. Oil annually.

CONDENSER
Made by Bush Mfg. Co., fan cooled, single-pass type condenser.

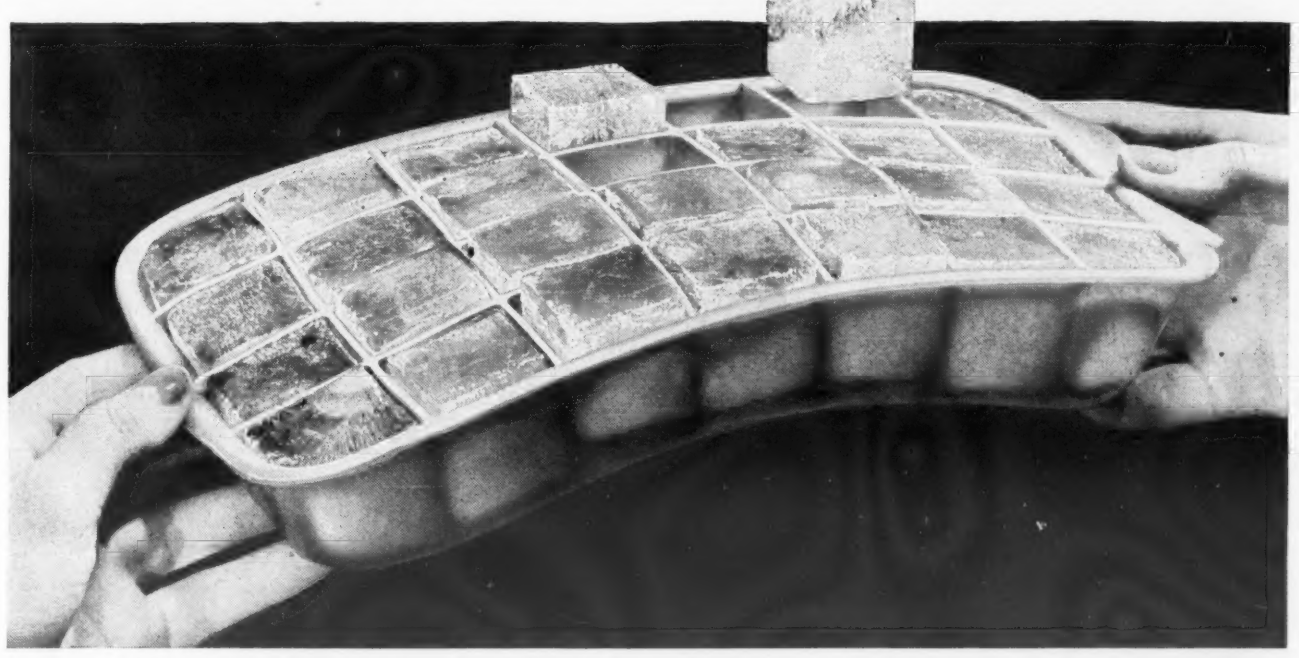
EVAPORATOR
Made by Mullins, welded steel stamping. Low-side float refrigerant control. Aluminum ice trays. Lift-release; one rubber tray.

CONTROL
General Electric adjustable temperature control, Model B-15, mounted inside the cabinet. Semi-automatic defrosting. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year—5-year protection plan.
Serviced by: Factory.
Replacement parts are not sold to independent service companies.

SPECIAL FEATURES
Automatic belt tightener.

The music may go round and round
but Ice Cubes must come out right here



● Millions of people who like their music to go round and round dislike ice cubes that go round the sink.

That fact is supported by the indisputable evidence of a recent survey of refrigerator purchasers, 99% of whom expressed a preference for the modern ice cube convenience offered by Flexible Rubber Trays and Grids.

Today, refrigerator buyers expect to get their ice cubes at the refrigerator, quickly and easily—with a flip of a finger—one cube at a time or a whole trayful. They expect to get all the ice they freeze and to have ice cubes which are full-sized, cold, and dry.

Give your salesmen the benefit of this consumer demand, and the full-page Flexible Rubber Tray and Grid advertising in leading magazines. Give your salesmen the advantage of demonstrating a refrigerator equipped with a Flexible Rubber Tray or Grid in every ice compartment. Insist that the refrigerator you sell comes equipped from the factory with this modern ice cube convenience.

THE INLAND MANUFACTURING COMPANY • DAYTON • OHIO

A TRULY MODERN REFRIGERATOR SHOULD HAVE A
FLEXIBLE RUBBER TRAY OR GRID
IN EVERY ICE COMPARTMENT

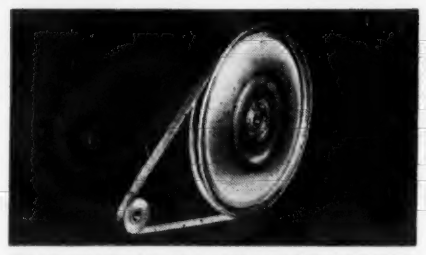
LEADING MAKERS OF REFRIGERATING AND AIR CONDITIONING EQUIPMENT STANDARDIZE ON

Dayton V-BELTS

● Because of their outstanding advantages Dayton V-Belts have been used as original equipment on leading makes of air conditioning equipment, electric refrigerators, washing machines and other appliances for many years.

Dayton V-Belts are the logical choice because they provide silent, dependable transmission—because their powerful grip prevents slippage—because they run smoothly without weaving, twisting or vibrating.

A nearby distributor carries a complete stock of Dayton V-Belts at all times and can quickly supply you. Write us for price list and complete information.



Whether for Fractional or a Thousand H.P. there is a Dayton V-Belt Drive for the job.

THE DAYTON RUBBER MANUFACTURING CO. • DAYTON, OHIO

World's Largest Manufacturer of V-Belts

NEW

PEERLESS 1936 CATALOG

NEW PRICES NEW COILS

NEW PRODUCTS

COMPLETE ENGINEERING DATA

WRITE OR WIRE FOR YOUR COPY!

PEERLESS ICE MACHINE CO.

CHICAGO 515 W. 35th St. TWO FACTORIES NEW YORK 43-00 36th St., L.I.C.

Representatives in all principal cities.

Zoning Plan Brings Repeat Orders

BIRMINGHAM, Ala.—Salesmen are assigned definite territories, and given credit for all soles made in them, under the outside selling plan on electric refrigerators and other appliances recently adopted by Evans Electric Appliances, General Electric dealer here.

"The zoning plan makes a salesman work his territory more intensively," says J. M. Evans, manager. "He doesn't waste a lot of time jumping from one part of the town to another. By keeping contact with old customers, he is able to place additional appliances in the home; and, in addition, obtain the names of other prospects.

"Before we put this plan into effect, the hardest job we had was to induce salesmen to call back on prospects. They preferred to look for greener pastures elsewhere, oftentimes passing up prospects right under their noses.

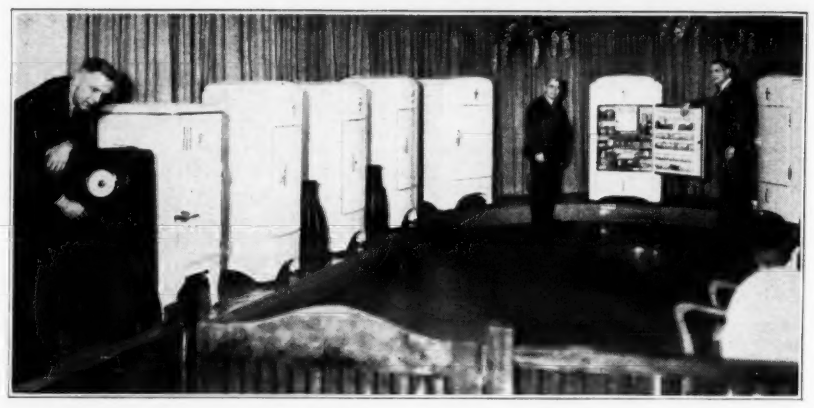
"Our salesmen work all appliances, and some of them have made as many as half a dozen sales in the same home. These repeat customers are well worth having, and encourage the salesman to stay with his job and to develop a regular clientele."

Jefferys Named Crosley Manager in South

ATLANTA—Appointment of P. M. Jefferys of this city as manager of the Florida, Georgia and Alabama district for Crosley Radio Corp. was recently reported by officials of the company.

For the past eight years, Mr. Jefferys has been district manager in the southeastern territory for RCA Radiotron Co.

Close Cooperation with Dealers Is Backbone Of Illinois Crosley Distributor's Policy



STERLING, Ill.—Keynote of the principles by which Hardware Products Co., distributor of Crosley refrigerators and radios in this territory, has built up sales, is the organization plan for its dealer set-up, according to A. W. Wheeler, president of the concern.

When the company took on the Crosley line of refrigerators in 1932, its first step was to secure complete coverage of its territory. Dealers representing this distributorship, claims Mr. Wheeler, may be found in every small town or village within Hardware Products Co.'s operating district, which extends from the outskirts of Chicago on the East, to territory in Iowa on the West.

Close cooperation with its dealers is the backbone of the company's policy. Special emphasis is laid on prompt delivery service.

"Any of our dealers," says Mr. Wheeler, "may phone in as late as four o'clock in the afternoon and have a Crosley Shelvador at his store the next morning.

"Of course this delivery promise doesn't hold if the order is for a carload, and some of our dealers in such cities as Davenport, Iowa, and Rockford, Ill., and even those in smaller towns, who want to trade in on the advertising value of carload buying are ordering their refrigerators in carload lots this year."

Six salesmen, operating under vice-president L. C. Wheeler, devote their time exclusively to refrigeration sales, and through them the company keeps in close contact with its dealers. Salesmen in the hardware division work with the refrigeration sales crew by supplying them with new leads.

Maintaining a service department, part of whose work is to help the dealers with service problems, and to supply them with mechanical information to background their selling work, is another important factor of the Hardware Products Co.'s policy. Newly appointed dealers are asked to spend a day at the warehouse "getting acquainted" with the mechanical story of their new line, Grant Peterson, service department head states.

This distributor ties in with its dealers in sponsoring advertising in newspapers and movies, aids them in putting on special showings, and conducts a direct mail campaign by which dealers receive new sales suggestions and promotional literature each week.

CANADIAN

Westinghouse

Golden Jubilee

REFRIGERATOR

Its Beauty is Long Lasting—it's BONDERIZED

IN addition to the advantages of dependability, long life, convenience, fast service and economy, Canadian Westinghouse refrigerators include another outstanding feature . . . Bonderizing for finish protection.

Under the gleaming white lacquer, Bonderizing provides a rust preventive quality that holds the finish. Bonderizing gives secure anchorage to the finish, preventing chipping or peeling. It is a plus quality that is of vital importance to the buyer.

For more than 21 years, we have devoted our entire time, talent and energy to the improvement of rust-proofing methods. A book showing what a refrigerator salesman should know about Bonderizing, is available.

PARKER RUST-PROOFING processes

BONDERIZING • PARKERIZING

PARKER RUST-PROOF COMPANY • 2197 E. MILWAUKEE AVE., DETROIT, MICHIGAN

GILFILLAN

Gilfillan Bros., Inc., Los Angeles, Calif.

	S65	S67	I66	D67	D610
Model No.					
Compressor Model No.	D	E	E	E	E
PRICE					
Retail price, installed	$109.50	$154.50	$149.50	$194.50	$235.00
Cabinet finish, exterior	Dulux				
CABINET DIMENSIONS					
Overall height (inches)	53½	58¾	60	65⅛	71
Overall width (inches)	23⅞	30	26½	30	33
Overall depth (inches)	21½	24½	23	24	24
Inside height (inches)	26⅞	31	30	34	39⅞
Inside width (inches)	19½	23⅝	22½	23⅝	26⅝
Inside depth (inches)	15⅝	17¼	16	16	16
Number of doors	1				
STORAGE CAPACITY					
Net food storage (cu. ft.)	4.0	6.5	5.33	6.8	9.0
Number of shelves	4	6	6	7	6
Total shelf area (sq. ft.)	9.1	13.5	13.6	14.33	18.16
Cabinet finish (interior)	Porcelain				
INSULATION					
Top (thickness in inches)	2½	2¼	2½	3	3
Sides	2	3	2½	3	3
Back	2	3	2½	3	3
Door	2½	3	2¾	3	3
Bottom	2½	3	3	3	3
ICE CUBES					
Number of shallow trays	2	3	3	2	4
Number of deep trays	0	0	0	1	1
Total number of cubes	56	84	84	112	140
Total weight of cubes (lbs.)	5	7½	7½	10	15
COMPRESSOR					
Ice melting effect 24 hrs. (lbs.)	135	175	175	175	175
Motor horsepower	1/6	1/5	1/5	1/5	1/5
Refrigerant in system (lbs.)	3½	3½	3½	3½	3½
Quantity of lubricant (oz.)	16	16	16	16	16
Belt circumference (inches)	34	34	34	34	34
Belt width (64ths of an inch)	32	32	32	32	32
WEIGHT					
Net weight (lbs.)	280	370	370	430	530
Shipping weight (lbs.)					

COMPRESSOR

Made by Gilfillan, open, reciprocating horizontally opposed, belt-driven compressor located below food compartment. Shaft seal, Gilfillan rotary.

Compressor Model No. D—twin cylinder, 500 r.p.m., 1⅝-in. bore, 1⅛-in. stroke.

Compressor Model No. E—twin cylinder, 575 r.p.m., 1⅝-in. bore, 1⅛-in. stroke.

Refrigerant, sulphur dioxide. Lubricant, Sinclair.

CABINET

Made by Seeger. Sitka spruce frame with Balsam Wool package insulation, Textolite breaker strip, Miller cushion rubber gasket.

HARDWARE

Made by National Lock Co. Polished-chromium finish.

MOTOR

Capacitor type made by General Electric. Oil annually.

CONDENSER

Bush, fan cooled, double row finned radiator condenser.

EVAPORATOR

Made by Gilfillan of copper and brass, continuous tube figure eight.

Mayson automatic expansion valve refrigerant control.

Aluminum and rubber ice trays. Alumilite fin.

CONTROL

Cutler-Hammer and General Electric adjustable temperature control, mounted inside the cabinet. Manual and wide-cycle defrosting with vacation cycle.

Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year. Optional additional four years on condensing system for $5.00 additional.

Serviced by: Gilfillan or authorized service company.

Replacement parts are not sold to independent service companies.

SPECIAL FEATURES

No repairs in home—units exchanged for factory-tested units or assemblies. (Discharge valves installed in heads.)

New Pre-Fabricated Home Conditioned

MILWAUKEE—Development of a new "Twentieth Century" factory-built home with six rooms and a bath, selling for less than $4,000, has been announced by Richard Binkowski, business manager of the house division of Harnischfeger Corp. here.

Styled in modern architecture, the new type of house is priced to sell on a monthly payment plan of $35 a month or less, including interest, taxes, reduction of principal, insurance, and service charges; or, under terms of the Federal Housing Administration amortized mortgage plan, through a local bank or loan association over a period of 20 years, according to Mr. Binkowski.

Based on economists' findings that a family should not pay more than two to three times its annual income for a home, or that monthly carrying charges should not exceed one-quarter of the family's monthly income, the company aims to build a home suitable for the 85% of the families in the United States who have incomes of $3,000 or less.

Two large bedrooms with a modern system of cross ventilation, a living room, dining room, an equipped kitchen, heater room, and bath are included. The home may be had either with or without basement.

Heated by an air-conditioning forced warm air system, the entire house is completely insulated, making it warmer in the winter and cooler in the summer, reducing operating costs and adding to comfort, convenience, and cleanliness, the manufacturer claims.

Framework of the house is fabricated from steel sections bolted and welded together, and the exterior wall assembly consists of weather-resisting color-process coatings, which when applied over the building board and asphaltic coatings furnish protection against wind, moisture, and weathering.

As further protection against cold and dampness and to add structural strength to the building, galvanized metal sheets on the underside of the base of the house hermetically seal the floor sections.

Doors throughout the inside of the home are of honeycomb core construction with flush veneer sides, the type of door used on ocean liners because of its lightness, durability, and proof against warping.

Red oak has been used for the floors of the living room, dining room, hall, bedroom, and closets; and linoleum covers the kitchen and bathroom floors. Kitchen equipment includes upper cabinets, a modern built-in sink-cabinet combination, and a range.

For the present, "Twentieth Century Homes" will be marketed only in the southern half of Wisconsin, where sales will be made through real estate brokers. The factory will be responsible for the erection of the house, sub-letting contracts to local contractors who will do the actual erection under the supervision of factory men.

Alabama Hardware Firm Enters Appliance Field

LEEDS, Ala.—Leeds Supply Co. here recently announced its retirement from the retail hardware business to start what will be known as the Alabama Appliance Co., Inc., distributor of wholesale and retail electrical and mechanical household and commercial appliances.

Located at 2015 Fourth Ave., N., in Birmingham, the new company will also have a retail outlet in metropolitan Birmingham.

C.I.T. Sets up Seventh North Carolina Office

SALISBURY, N. C.—With the opening of quarters at 132 N. Main St. here recently, C. I. T. Corp., finance company, established its seventh office in North Carolina.

Other of the offices in the state are located in Asheville, Greensboro, Hickory, Raleigh, Charlotte, and Wilson.

H. F. Yost, until now manager of the C. I. T. office in Charlotte, will be in charge of the new office, and A. C. Vestal, who has been Salisbury representative for the company, will be associated with him.

Decision to inaugurate a local service for this city came as a result of the company's expanding business here, and indications of general business improvement in this district, according to J. S. Reilly, New York City, divisional superintendent for C. I. T., who completed the arrangements.

Two New Washers Added To G-E, Hotpoint Line

BRIDGEPORT, Conn. — Two new wringer type deluxe washers, each of nine-pound capacity, have been added to the General Electric and Hotpoint washer lines.

G-E model AW-27P uses the "one control" wringer, and the Hotpoint model AW-47P uses a Lovell trough-type deluxe wringer. Both models are equipped with activators and friction-drive impeller-type pumps.

Rounded edges prevent water from spilling when the cover is removed, and a round white-lacquered steel skirt conceals the pump.

Both models are equipped with precision-type, steel-cut gear assembly, having only four moving parts, and with a ¼-hp. "cushioned-power" motor.

CHALLENGER & LECTRIK-ICE

Uniflow Mfg. Co., Erie, Pa.

	Challenger		Lectrik-Ice			
Trade name						
Model No.	M-45	M-60	DM-5	DM-6	DM-7	DM-8
Compressor Model No.	A	A	A	B	B	B
PRICE						
Retail price, installed						
Cabinet finish, exterior	Lacquer					
CABINET DIMENSIONS						
Overall height (inches)	53¼	56	56	56	56	56
Overall width (inches)	23	26½	24½	28½	31⅞	35¼
Overall depth (inches)	23½	24	24½	24½	24½	24½
Inside height (inches)	26½	27½	29½	29½	29½	29½
Inside width (inches)	19¼	20½	18½	22½	25⅞	29¼
Inside depth (inches)	15¼	16¾	17⅜	17⅜	17⅜	17⅜
Number of doors	1					2
STORAGE CAPACITY						
Net food storage (cu. ft.)	4.6	6.0	5.02	6.03	7.04	8.04
Number of shelves	3	4				
Total shelf area (sq. ft.)	8	12	10.53	12.83	15.075	15.83
Cabinet finish (interior)	Porcelain					
INSULATION						
Top (thickness in inches)	2	2½	3	3	3	3
Sides	1½	2	3	3	3	3
Back	1½	2	3	3	3	3
Door	2	2½	3	3	3	3
Bottom	2	2½	3	3	3	3
ICE CUBES						
Number of shallow trays	2	3	2	3	2	2
Number of deep trays	0				1	1
Total number of cubes	56	84	56	84	112	112
Total weight of cubes (lbs.)	4	6	4	6	8	8
COMPRESSOR						
Ice melting effect 24 hrs.						
Motor horsepower	1/6	1/6	1/6	1/4	1/4	1/4
Refrigerant in system (lbs.)	1¾	1¾	1¾	1¾	1¾	1¾
Quantity of lubricant (oz.)	8	8	8	24	24	24
Belt circumference (in.)	35½	35½	35½	40	40	40
Belt width (64ths of inch)	44					
WEIGHT						
Net weight (lbs.)	290	310	329	341	375	390
Shipping weight (lbs.)						

COMPRESSOR
Made by Uniflow, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, bellows.
Compressor Model No. A—single cylinder, 450 r.p.m., 1⅝-in. bore, 1-in. stroke.
Compressor Model No. B—single cylinder, 450 r.p.m., 1⅝-in. bore, 1¾-in. stroke.
Refrigerant, methyl chloride. Lubricant, white mineral oil.

CABINET
Challenger line made by Erie Art Metal Co. Hardwood frame with Temlock insulation, hard rubber breaker strip, rubber gasket. Lectrik-Ice cabinet made by Niagara. Hardwood frame, Dry-Zero insulation, bakelite breaker strip, rubber gasket.

HARDWARE
Made by Grand Rapids Brass. Chrome finish.

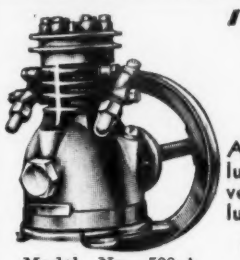
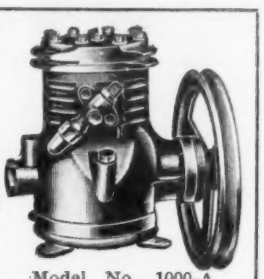
MOTOR
Capacitor type made by Master. Oil every 3 months.

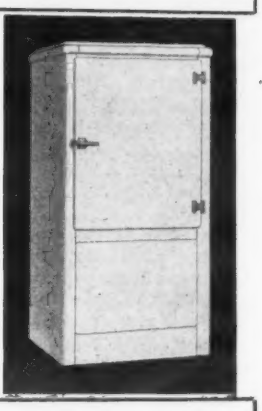
CONDENSER
Made by Fedders Mfg. Co., fan cooled, fin tube condenser.

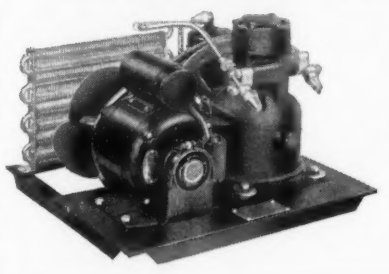
EVAPORATOR
Uniflow copper electro-tinned. Thermostatic refrigerant control, Detroit Lubricator expansion valve. Aluminum ice trays.

CONTROL
Ranco adjustable temperature control, mounted inside cabinet. Model No. ——— Manual defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY
Guarantee on Lectrik-Ice cabinet: One year.
Guarantee on Lectrik-Ice system: One year.
Serviced by: Dealers and distributors.
Replacement parts are sold to independent service companies.


"CHIEFTAIN"
QUALITY-BUILT COMPRESSORS and CONDENSING UNITS
All bearings diamond bored. Positive lubrication of piston by newly developed process plus forced feed lubrication in all models.
Sizes: 1/6, 1/5, 1/4, 1/3 h.p.
Write for prices

Model No. 500-A
Model No. 1000-A
TECUMSEH PRODUCTS CO.
Tecumseh, Mich.

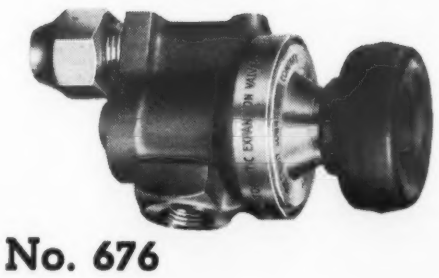
STEELCRAFT
REFRIGERATOR CABINETS
WE MANUFACTURE DISTINCTIVE FOUR AND SIX CU. FT. MODELS
WRITE, WIRE, OR PHONE FOR PRICES
STEELCRAFT INDUSTRIES, INC.
4851 SPRING GROVE AVE.
CINCINNATI, OHIO


CONDENSING UNITS and COMPRESSORS FOR HOUSEHOLD REFRIGERATION BY

JOMOCO, INC.
A SUBSIDIARY OF THE JOHNSON MOTOR CO.
Waukegan, Ill.
CABLE ADDRESS: JOMOCO-WAUKEGAN

• SIMPLE
• EFFICIENT
• ECONOMICAL

AUTOMATIC EXPANSION VALVES

No. 672


No. 676

THE "Genuine Detroit" Automatic Expansion Valves No. 672 and No. 676 are the last word for domestic refrigerators employing the direct expansion system. The No. 672 has been standard equipment on many of the outstanding domestic units for the last ten years and has an enviable record of effective operation. It is easily installed, easily adjusted and easily cleaned. Sturdy construction and corrosion resistant materials assure maximum durability.

The No. 676 incorporates these same advantages of durability and trouble free operation. The No. 676 is actuated by a diaphragm instead of the bellows used in the No. 672.

Both valves are equipped with large strainers and both hold their adjustment accurately.

DETROIT LUBRICATOR COMPANY
DETROIT, MICH. U. S. A.
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LOS ANGELES, CALIF.—320 Crocker Blvd.
DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION
Canadian Representative—RAILWAY AND ENGINEERING SPECIALTIES LIMITED, Montreal, Toronto, Winnipeg

O'KEEFE & MERRITT

O'Keefe & Merritt Co., Los Angeles, Calif.

Model No.	636	736	1036
Compressor Model No.			
PRICE	Los Angeles prices		
Retail price, installed	$194.50	$219.50	$319.50
Cabinet finish, exterior	Dulux		
CABINET DIMENSIONS			
Overall height (inches)	59¼	62¼	62¼
Overall width (inches)	29	31	43
Overall depth (inches)	22¾	22¾	22¾
Inside height (inches)	30	33	33
Inside width (inches)	22	24	36
Inside depth (inches)	17	17	17
Number of doors	1	1	2
STORAGE CAPACITY			
Net food storage (cu. ft.)	6.22	7.42	10.45
Number of shelves	4	4	4
Total shelf area (sq. ft.)	11.2	12.2	20.0
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	3½	3½	3½
Sides	3½	3½	3½
Back	3	3	3
Door	3	3	3
Bottom	3	3	3
ICE CUBES			
Number of shallow trays	3	4	6
Number of deep trays	0	0	0
Total number of cubes	84	112	168
Total weight of cubes (lbs.)	5¼	7	10½
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	103	135	161
Motor horsepower	1/6	1/6	1/6
Refrigerant in system (lbs.)	3	3½	3¾
Quantity of lubricant (oz.)	18	18	18
Belt circumference (inches)	34		
Belt width (64ths of an inch)	32		
WEIGHT			
Net weight (lbs.)	425	450	575
Shipping weight (lbs.)			

COMPRESSOR
Made by O'Keefe & Merritt, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. 636—twin cylinder, 450 r.p.m., 1¼-in. bore, 1¼-in stroke.

Compressor Model No. 736—twin cylinder, 450 r.p.m., 1⅜-in. bore, 1¼-in. stroke.

Compressor Model No. 1036—twin cylinder, 450 r.p.m., 1½-in. bore, 1¼-in. stroke.

Refrigerant, Sulphur dioxide. Lubricant, Sunisco.

Shaft seal, rotary.

CABINET
Made by O'Keefe & Merritt. Wood frame with Celotex insulation, Panelyte breaker strip, rubber gasket.

HARDWARE
Made by National Lock Co. Chrome-plated brass.

MOTOR
Capacitor type made by Wagner. Oil every three months.

CONDENSER
Flexco, fan cooled, fin condenser.

EVAPORATOR
O'Keefe & Merritt, steel shell. Detroit Lubricator thermal expansion valve refrigerant control.

Aluminum ice trays. Tray release, rubber tray.

CONTROL
Ranco adjustable temperature control, Model KR439, mounted inside the cabinet. Semi-automatic defrosting with vacation cycle. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One-year guarantee; five-year protection plan for $5.00 additional.

Guarantee on system: One-year guarantee; five-year protection plan for $5.00 additional.

Serviced by: O'Keefe & Merritt Co.

Replacement parts sold to independent service companies.

SPECIAL FEATURES
Thermometer, interior light, vegetable freshener, dairy basket, arranging shelf, rubber shelf supports, double-activity door latch, unit compartment insulated.

TRUPAR

Trupar Mfg. Co., Detroit, Mich.

Model No.	M-436	M-736	M-936
Compressor Model No.	C2-16	C2-16	C2-20
PRICE			
Retail price, installed	$119.50	$199.50	$249.50
Cabinet finish, exterior	Lacquer		
CABINET DIMENSIONS			
Overall height (inches)	54⅜	58	61½
Overall width (inches)	23⅞	30⅛	32⅞
Overall depth (inches)	23	26¾	26⅛
Inside height (inches)	26⅝	30	33½
Inside width (inches)	19½	23¾	26½
Inside depth (inches)	16¼	19⅛	18½
Number of doors	1		
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.5	7.10	9.01
Number of shelves	3	4	5
Total shelf area (sq. ft.)	8.5	14.0	17.4
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	2	3	3
Sides	2	3	3
Back	2	3	3
Door	2½	3	3
Bottom	2	3¼	3¼
ICE CUBES			
Number of shallow trays	3	2	2
Number of deep trays	0	2	1
Total number of cubes	63	98	126
Total weight of cubes (lbs.)	6	9	11
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	115	115	138
Refrigerant in system (lb.)	1/6	1/6	1/5
Quantity of lubricant (pt.)	1	1	1
Quantity of lubricant ( )	7/8	7/8	7/8
Belt circumference (inches)			
Belt width (64ths of an inch)			
WEIGHT			
Net weight (lbs.)	280	335	370
Shipping weight (lbs.)			

COMPRESSOR
Made by Trupar, open, reciprocating, belt-driven compressor located below food compartment. Bellows shaft seal.

Compressor Model No. C2-16—twin cylinder, 420 r.p.m., 1¼-in. bore, 1⅛-in. stroke.

Compressor Model No. C2-20—twin cylinder, 490 r.p.m., 1¼-in. bore, 1⅛-in. stroke.

Refrigerant, methyl chloride. Lubricant, Suniso.

CABINET
Made by Truscon. Steel frame with Thermocraft insulation, Panelyte breaker strip, rubber gasket.

HARDWARE
Made by Grand Rapids Brass. Brass, chromium finish.

MOTOR
Capacitor-start type made by Delco and Emerson. Oil semi-annually.

CONDENSER
Made by Long Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR
Made by Mullins, of steel, dry expansion type evaporator. Detroit Lubricator expansion valve refrigerant control. Aluminum ice trays. Rubber tray in M-736 and M-936.

CONTROL
Cutler-Hammer and Penn adjustable temperature control Model No. ——— mounted inside the cabinet. Wide-cycle defrosting with vacation cycle. (Cutler-Hammer) hand reset solder pot, and (Penn) hand reset bimetal overload protector.

POLICY
Guarantee on cabinet: One year.

Guarantee on system: One year warranty—four-year replacement contract.

Serviced by: Distributors and dealers.

Replacement parts are sold to independent service companies in some territories.

BUNDY TUBING
for
DEPENDABILITY
DURABILITY
DIVERSABILITY

Bundyweld Steel Tubing is adaptable to a wide range of uses in the refrigeration and air conditioning industry. It is being used by a number of the largest refrigeration manufacturers for condenser tubes.

Bundyweld Steel Tubing is copper-coated both inside and outside. The reducing atmosphere used in the brazing process leaves both inside and outside absolutely clean and free from scale and oxides. I.D. and O.D. are held to tolerances of .003". Uniformity of wall thickness is an outstanding feature. Bundyweld Tubing is adaptable to almost any tube application. It is furnished in base sizes of 1/8", 3/16", 1/4", 5/16", 3/8", 7/16", 1/2", and 5/8" in various wall thicknesses. These base sizes can be drawn to any odd size required. Furnished with or without fittings, either completely fabricated or in straight lengths. Send blue prints or samples for quotations.

Bundy Tubing Company
10951 Hern Ave., Detroit, Mich.

Specifications Index

Apex	35
Challenger (Uniflow)	29
Childare (Potter)	33
Coldspot (Sears-Roebuck)	23
Copeland	23
Crosley	10
Dayton (Heinz & Munschauer)	17
Electro-Kold	35
Fairbanks-Morse	16
Federal	25
Frigidaire	8
Gaffers & Sattler	27
General Electric	6
Gibson	31
Gilfillan	28
Grunow	22
Hostess	26
Hotpoint	19
Ice-O-Matic	14
Kelvinator	6
Lectrik-Ice (Uniflow)	29
Leonard	14
Mayflower	18
Merchant & Evans	19
Norge	8
O'Keefe & Merritt	30
Potter	33
Sanitary	19
Sparton (Sparks-Withington)	22
Starr Freeze	25
Stewart-Warner	16
Trupar	30
Truscon	23
Universal Cooler	10
Universal (Landers, Frary & Clark)	31
Ward (Montgomery Ward)	33
Westinghouse	12
Zerozone	35

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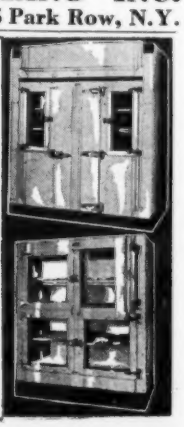
An exclusive feature (patent pending) available only in Koch Display Cases. These coils operate at higher back pressure and higher humidity, yet occupy less space. Distributors wanted for complete commercial cabinet line. Attractive prices.



GIBSON

Gibson Electric Refrigerator Corp., Greenville, Michigan.

Model No.	S-46	S-66	S-86	SD-646	CB-696	PCB696	CB796	PCB796
Compressor Model No.	H-6	H-6	H-6	H-6	H-6	H-6	H-6	H-6
PRICE								
Retail price, installed								
Cabinet finish, exterior	Lacquer					Porc.	Lac.	Porc.
CABINET DIMENSIONS								
Overall height (inches)	50⅛	55½	60½	55½	57⅛	57⅛	60½	60½
Overall width (inches)	24	29⅝	33⅞	29⅝	30	30	30	30
Overall depth (inches)	21¾	26	26¾	26	26¼	26¼	27¾	27¾
Inside height (inches)	26½	29⅞	33⅞	29⅞	31½	31½	33⅛	33⅛
Inside width (inches)	19⅝	23¼	27	23¼	23⅝	23⅝	23⅝	23⅝
Inside depth (inches)	14½	16	16	16	16	16	17¼	17¼
Number of doors	1							
STORAGE CAPACITY								
Net food storage (cu. ft.)	4.0	6.0	8.0	6.0	6.0	6.0	7.0	7.0
Number of shelves	3	5	6	4	4	4	5	5
Total shelf area (sq. ft.)	7.5	11.8	16.2	11.8	12.0	12.0	15.8	15.8
Cabinet finish (interior)	Porcelain							
INSULATION								
Top (thickness in inches)	2	2½	3	2½	2	2	2½	2½
Sides	2	3	3¼	3	3	3	3	3
Back	2	3	3¾	3	3	3	3⅜	3⅜
Door	2½	3	3	3	3¼	3¼	3¼	3¼
Bottom	2	3	3½	3	3	3	3½	3½
ICE CUBES								
Number of shallow trays	2	2	3	4	4	4	3	3
Number of deep trays	0	1	1	1	1	1	2	2
Total number of cubes	42	84	105	105	105	105	105	105
Total weight of cubes (lbs.)	2½	5	6¼	9½	9½	9½	10¼	10¼
COMPRESSOR								
Ice melting effect*	175	175	175	175	175	175	175	175
Motor horsepower	1/5	1/5	1/5	1/5	1/5	1/5	1/5	1/5
Refrigerant in system (oz.)	40 to 56							
Quantity of lubricant (oz.)	16	16	16	16	16	16	16	16
Belt circumference (inches)	No belts							
Belt width (64ths of an inch)	No belts							
WEIGHT								
Net weight (lbs.)	247	310	375	324	341	357	361	380
Shipping weight (lbs.)								

COMPRESSOR
Made by Gibson, sealed, reciprocating, direct-driven compressor located below food compartment.
Compressor Model No. H-6—twin cylinder, 1740 r.p.m., $1\,{}^{1}/_{16}$-in bore, $^{11}/_{16}$-in. stroke.
Refrigerant, sulphur dioxide. Lubricant, Sunoco. No shaft seal.

CABINET
Made by Gibson. Wood and steel frame with Balsam Wool insulation, Panelyte breaker strip. Balloon-type rubber gasket.

HARDWARE
Made by Winters & Crampton and National Lock with chrome-plated finish.

MOTOR
Capacitor-start induction-run type made by Delco and General Electric. Permanently oiled.

CONDENSER
McCord and Chase Brass, fan cooled, finned coil condenser.

EVAPORATOR
Made by Gibson, copper plate and boiler type. Freezer shelf type on CB and SD models.
High-side float refrigerant control. Anodic aluminum finish ice trays with ice tray release.

CONTROL
Ranco adjustable temperature control type KR and Tagliabue adjustable temperature control No. R-19 mounted inside the cabinet. Wide-cycle defrosting with vacation cycle.
Automatic reset overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: Five years.
Serviced by: Distributors and dealers.
Replacement parts are sold to independent service companies.

SPECIAL FEATURES
Interior light on all models; Stor-a-Space and Util-a-Rac on CB models.

*Ice melting effect per 24 hours with 20° evaporator.

UNIVERSAL

Landers, Frary & Clark, New Britain, Conn.

Model No.	1444	1455	1466	1477	1488	1866	1877	1888
Compressor Model No.	150ER							
PRICE								
Retail price, installed	$129.50	$159.50	$189.50	$219.50	$259.50	$219.50	$259.50	$309.50
Cabinet finish, exterior	Dulux					Porcelain		
CABINET DIMENSIONS								
Overall height (inches)	53½	56½	59¼	64⅛	62½	59¼	64⅛	62½
Overall width (inches)	25½	26½	30½	30½	34¼	30½	30½	34¼
Overall depth (inches)	21	22	22½	22½	23¾	22½	22½	23¾
Inside height (inches)	27½	29⅞	31½	36½	38⅝	31½	36½	38⅝
Inside width (inches)	19½	20½	23½	23⅝	27¼	23½	23⅝	27¼
Inside depth (inches)	15	16	15½	15½	15⅞	15½	15½	15⅞
Number of doors	1							
STORAGE CAPACITY								
Net food storage (cu. ft.)	4.2	5.0	6.1	7.1	8.1	6.1	7.1	8.1
Number of shelves	5	5	5	6	6	5	6	6
Total shelf area (sq. ft.)	9.1	10.8	11.7	14.5	15.9	11.7	14.5	15.9
Cabinet finish (interior)	Porcelain							
INSULATION								
Top (thickness in inches)	2	2	3	3	3	3	3	3
Sides	2½	2½	3	3	3	3	3	3
Back	2	2	3	3	3	3	3	3
Door	3	3	3	3	3	3	3	3
Bottom	2	2	3	3	3	3	3	3
ICE CUBES								
Number of shallow trays	2	3	3	4	4	3	4	4
Number of deep trays	0	0	0	0	0	0	0	0
Total number of cubes	56	84	84	112	112	84	112	112
Total weight of cubes (lbs.)	4	6	6	8	8	6	8	8
COMPRESSOR								
Ice melting effect 24 hrs. (lbs	120	120	120	155	155	120	155	155
Motor horsepower	1/6	1/6	1/6	1/4	1/4	1/6	1/4	1/4
Refrigerant in system (lbs.)	4 to 5 lbs.							
Quantity of lubricant (oz.)	32	32	32	32	32	32	32	32
Belt circumference (inches)	35	35	35	36	36	35	36	36
Belt width (64ths of an inch)	34	34	34	34	34	34	34	34
WEIGHT								
Net weight (lbs.)	270	300	335	360	375	360	385	410
Shipping weight (lbs.)								

COMPRESSOR
Made by Landers, Frary & Clark, open, rotary, belt-driven compressor located below food compartment.
Compressor Model No. 150-ER, driven at 650 r.p.m. on models 1444, 1455, 1466, and 1866 and at 850 r.p.m. on models 1477, 1877, 1488, and 1888.
Refrigerant, sulphur dioxide. Lubricant, Sunisco. Shaft seal, bellows.

CABINET
Made by Seeger. Wood and steel frame with Multicell insulation, bakelite breaker strip, rubber gasket.

HARDWARE
Made by Landers, Frary & Clark and National Lock with chrome-plated finish.

MOTOR
Repulsion-induction and condenser-start types made by Delco. Oil every six months.

CONDENSER
Made by Bush Mfg. Co., fan cooled, fin type condenser.

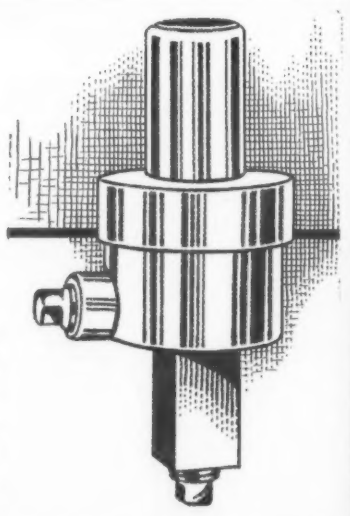
EVAPORATOR
Made by Mullins, porcelain on steel.
Low-side float valve refrigerant control with Landers, Frary & Clark expansion valve.
Aluminum ice trays with one rubber tray in each model and tray release for metal ones.

CONTROL
Cutler-Hammer adjustable temperature control Type G (bulletin 9502), mounted inside the cabinet.
Wide-cycle defrosting. Hand reset solder pot overload protector.

POLICY
Guarantee on cabinet: One year.
Guarantee on system: One year. Five-year protection plan optional for an additional $5.00.
Serviced by: Distributors and dealers.
Replacement parts are not sold to independent service companies.

For Better Temperature Regulation Temprite Two Temperature Suction Control

Valve Model 700



Of the same design as the valve which is responsible for the splendid performance of the Temprite Cooler. Model 700 valve has unusually high capacity, is very sensitive, yet is extremely sturdy and lasting.

Of the throttling type, it controls by regulation rather than by sudden closing and opening. At the cut-out point, however, it closes tight and stays closed so long as pressure is below cut-out.

Closing point readily adjusts between 15" vacuum and 26 lbs. pressure, so a single valve may be stocked to cover applications using sulphur dioxide, methyl chloride and Freon 12.

TEMPRITE 80° 40° INSTANTANEOUS

Use this Valve on any system controllable by suction pressure—particularly where very close temperature regulation is needed.

Write for specific data.

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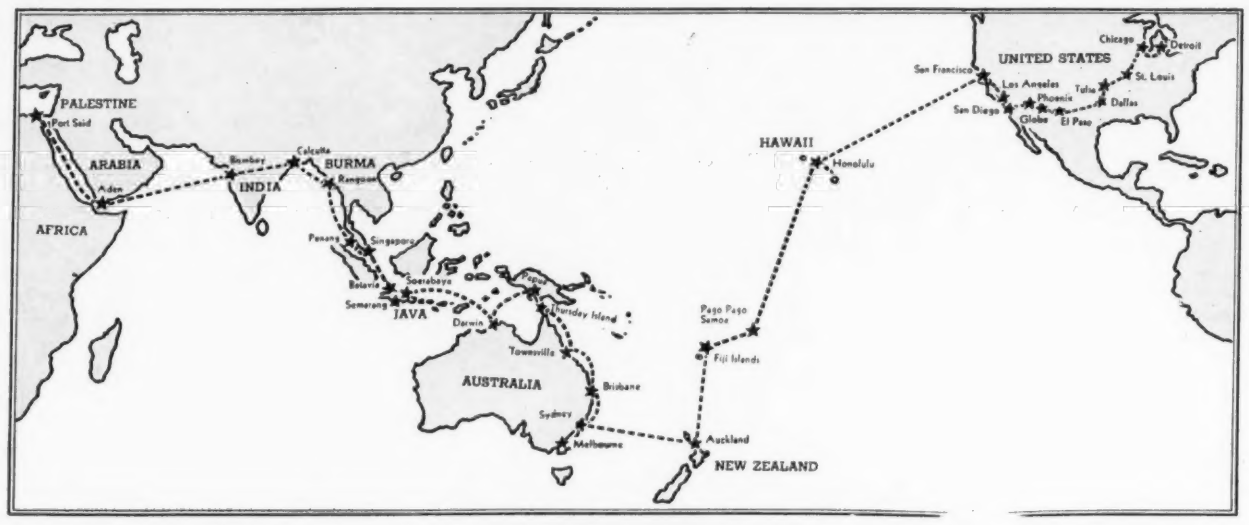
Around the World

With George F. Taubeneck

Finds New Zealand a Country Of Opportunity and Beauty



Wealthy New Zealand

Per head of population, New Zealand is one of the wealthiest countries in the world, for the wealth of each person in this self-governing British Dominion is almost $3,000. That, mind you, in a country which has been civilized for less than a century!

It got that way through assiduous cultivation of a few basic, primary industries: sheep, dairy products, fruit, wood, flax, gold, coal. You may be surprised to learn that New Zealand, and not one of the "old countries," is the largest cheese exporting nation in the world.

To the perspicacity and determination of the British emigrants who settled New Zealand (and who now comprise close to 95% of the total population) should go the credit for the rapid development of this beautiful, rich island continent.

Everything is very British in New Zealand—the accent, the sport, the social life, the outlook upon life, and business practices. The automobiles are nearly all British-made, as are most of the manufactured goods you see there. Cars drive on the left side of the road, too; and don't think that isn't a shock the first time it happens to you!

Climate? Well, it's diverse, to put it mildly. Warm, humid, rainy, perhaps it should be called sub-tropical. But it must be healthful, for New Zealand enjoys the lowest death rate (8.4 per thousand), as well as the lowest infant mortality rate, of any nation in the world.

Composed of North Island, South Island, Stewart Island, and Chatham Islands, the Dominion of New Zealand is located in the South Pacific Ocean, about 3½ days sail by fast liner from Sidney—which is about 1,500 miles distant.

Capital of the Dominion is at Wellington. There is a two-house Parliament (80 in the House of Representatives, 33 in the Legislative Council), three parties (United, Reform, and Labor), a Prime Minister, a Minister of Finance, and a Governor-General. Wellington has a population of 150,000.

Auckland, largest city and chief port, has some 225,000 inhabitants. Other cities include Christchurch (135,000) and Dunedin (90,000), both of which are on South Island. Wellington and Auckland are on North Island.

* * *

Beautiful Auckland

We didn't see the others, but we do know—and are glad to testify—that Auckland is a city of great beauty. It is well-planned, it is spacious, it is verdant, and it has that invincible combination of hills and harbor which never fail to convert visual ecstasy into emotional peace and spiritual piety.

From almost every portion of the city there are magnificent views of the sea, but especially from Mount Eden and One Tree Hill (which is surmounted by *three* trees) you can look out upon thousands of acres of tiled rooftops, lush gardens, and a quiescent expanse of harbor sea.

These two hilltops are the cones of extinct volcanoes, with the craters perfectly preserved in shape, albeit now overgrown with a carpet of green verdure.

* * *

City of Flowers

One thing which persistently comes to your attention is the continual recurrence of flower gardens. Municipal gardens and parks are seemingly everywhere, and private gardens exist in profusion. Every home is landscaped in a manner which only the rich afford in America.

Two-thirds of the flowering plants are unique, and will not resemble anything you ever saw before in a florist's shop. Ferns are all about (more than 100 varieties, we heard, including the giant king fern which doesn't attain maturity until it has passed the half-century mark), and some of the trees—all of which are evergreens—flower brilliantly, as they do in Hawaii.

New Zealand is one of the oldest of the land masses, geologically, and so long has it been separated from other continents that its flora and fauna have quite distinct characteristics.

Toi-toi grass, flax, tussock grass, raupo swamp reed, dense vie-strangled underbrush, variegated green bush, clematis, convolvulus, orchids, tree ferns, nikau palms, ponga and cabbage trees, and tea trees, are familiar flora in New Zealand, but unfamiliar to visitors.

Some of the native trees include the Pohutakawa, rata, Kawhai, rimu, totara, matai, kahikatea, hinau, puriri, and Kauri. The latter lives for centuries and centuries, and provides lumber for most construction activities in New Zealand.

* * *

Odd Birds

In Auckland's gardens, and everywhere in New Zealand, the visitor will be stopped by birds of odd appearance; for the fauna of the country is as uniquely indigenous as the flora. Particularly does this seem to be true of the bird life.

There's the brown-red-yellow Kakakura, which is somthing like a parrot, noisy and which climbs trees and hops but does not fly.

The Weka, or wood hen, can't fly, either; although it can run like hell. It's about the size of a bantam chicken with similar coloring.

The Kiwi bird doesn't even have wings. Its habits are nocturnal, its cry loud and unforgettable, its bill as long and forbidding as the one they present you at the Waldorf at the end of a week.

The Bellbird, or Kori-Mako, is purple and black, with swift, even-keeled flight, and a liquid call of bell-like tones.

Another bellringer of a singer is the Koko, or Parson Bird, which has a five-note chime like a Sparton auto horn. It is green and purple, with white trimming.

Very pretty is the pied fantail, which has an expanded tail like a fan, is brown and yellow with black head, and flies swiftly. Up in the hill country lives the Kea, which is both hawk and parrot with a mew like a cat and ferocity equal to a vulture. On top it's russet and green, but its wings are lined with scarlet.

* * *

Opportunity

Government experts estimate that New Zealand's wealth-in-the-land could easily support a population of ten millions, although only one-and-a-half millions live there now. Rich and fertile (much of it volcanic loam), crops are grown there all year 'round.

Begging is a criminal offense, and there is no poverty. Food is cheap and abundant. Residences are comparatively cheap. In addition to fundamental trades, and avenues of commerce not yet opened up, beekeeping, poultry, farming, dairying, cattle and sheep raising, fruit growing and truck gardening, and mineral prospecting are wide open to the settler who comes to New Zealand "on spec."

Sports include the regular English pastimes of rugby and soccer football, cricket, tennis, golf, rowing, croquet, and bowling, plus hunting for quail, pheasant, grey duck and wild pig, deer stalking, and deep sea fishing for native varieties of shark and swordfish. Trout fishing is reputedly the best in the world.

Now. Doesn't that sound like a country of opportunity?

* * *

Racing Fever

Two thing we forgot to mention when speaking of New Zealand's sports: swimming and horse racing. Everybody swims, and swims well from childhood. The 200 miles of harbor at Auckland provides dozens of excellent beaches. And after men consider themselves too old to swim, they get themselves "yachts, (all private vessels are called "yachts" there) and continue their regular aquatic relaxation.

As to racing, the country is nutty about it. In Auckland the Ellerslie course is one of the most beautiful to be found anywhere, particularly from the viewpoint of its gardening. Bookmakers are lawbreakers, but they do exist, and betting is the chief national vice.

New Zealand was the original home of the totalizer, that mechanical device which figures the odds and displays them just at race time. Betting by means of the totalizer is legal.

* * *

Patient British

It has been noted already that New Zealand is probably the most English in tone and manner of all the British Dominions. The story of New Zealand's settlement and the development of the port of Auckland is as typically British as the inhabitants of this Dominion are today.

A Dutchman discovered New Zealand. He was none other than that great hero of early Dutch navigation, Abel Janszoon Tasman, and he came to New Zealand December 13, 1642, according to the records. Zealandia Nova he named it, after a province in Holland. But the warlike Maoris were too threatening and troublesome to suit the Dutch, who had many other irons in the fire of Pacific conquest anyway; so when England's Captain Cook came along 127 years ago, he felt free to claim the land for the British Empire, for which he did so much in the line of expansion. Cook beat a Frenchman, de Surville, only by a month or so.

The native Maoris didn't like the British any more than they did the Dutch, but the patient Englishmen sent missionaries who were both ingratiating and courageous; and the first thing the Maoris knew, they were planting grain, giving up their idols, stopping their incessant internecine warfare, and becoming educated.

Then colonization began.

In 1840 Capt. WILLIAM HOBSON established the seat of government at Auckland, much to the chagrin of Wellington commercial interests, after carefully selecting the then unsettled site of Auckland as an ideal spot for a city and port.

The wisdom of his choice is more than apparent today, when one surveys Auckland's success as a seaport, and its growth. Wellington, however, finally became the capital.

* * *

Compressed Variety

Compacted into its boot-shaped confines, New Zealand has as great a variety of scenic wonders as America's Arizona-Colorado-California area — with possibly a little more of everything and less space to put it in, plus dashes of originality.

You have tropical forests, with a flora of greatest antiquity; stalacite-and-mite caves, with subterranean rivers; irresistible-force glaciers which move inexorably into melting South Sea waters; lakes and waterfalls and snowclad mountain peaks; eager geysers, and all their boiling family; volcanic peaks, smoldering and threatening; stupendously rugged flords—all in easy motor touring distance of Auckland.

* * *

Rotorua

Most famed of all New Zealand scenery is the Rotorua-Taupo "thermal-region," which is a 100-mile-long table-land dotted with lakes, scarred by rivers, and pierced with volcanos, geysers, boiling pools, and steam fissures.

Many of these effervescing springs of mineralized waters have been commercialized for the benefit of the ailing; but aside from the pleasant baths, they are sights for to see and to admire.

All manner of weird thermal marvels —boiling mud pools, incipient and gushing geysers, spectacular silica formations, bursting springs, plunging waterfalls, turbulent steam crevices, are crowded pell-mell into this region.

* * *

Alps and Things

New Zealand has her Alps, too. Mount Cook's crystalline peak towers 12,350 feet, and it is in a goodly peerage of other white-crowned crests on the West Coast of South Island.

Along this same West Coast is the Franz Joseph Glacier, a river of ice inching its way through a sub-tropic jungle. And following the rock-wrested route along Buller Gorge, one can drive down the West Coast to the Pancake Rocks of Punakaiki, which are neat stacks of rock strata, piled like poker chips or farm home stacks of corncake.

Down that same West Coast is Mitre Peak, topping the granite contours of the flords. There are waterfalls, too, including the world's highest (1,904 feet), the Great Sutherland.

Other wonders: Mt. Egmont, which rises symetrically from a plainsland to a snow-smothered peak 8,260 feet high. The Waitomoto Caves, with their web-weaving glow-worms; the deep-canyoned Wanganui river, which flows through thickly forested mountains and precipitious cliffs for some 200 miles; and the trio of mighty volcanos sequestered in Tongariro National Park. One of them, the snowy-fiery Ngauruhoe, is active, and shoots off fireworks at unpredictable times. Inasmuch as these pyrotechnics never do any damage, New Zealanders wish either that they would be more regular

(*Concluded on Page 34, Column 1*)

ITINERARY

On Jan 8, 1936, Editor George F. Taubeneck started from Detroit on a six-months trip to investigate refrigeration activities around the world.

In this issue he tells about Auckland, New Zealand. It is the sixteenth of his series of articles reporting experiences and interesting sidelights about the countries and peoples visited.

At every port of call he has had the good fortune to meet numerous subscribers of the NEWS who have given his a grand welcome.

Another instalment (April 29) will be required to complete his story about Auckland. After that will come reports of his visits to Melbourne, Sydney, and Brisbane, Australia.

During the past few weeks, Mr. Taubeneck has made stops in Papua, Java, and the Malay Peninsula. He is now in India.

Letters may be addressed to the Editor in care of the following subscribers:

(Mail to arrive before May 15)
Mr. H. A. Granary
Frigeco, S.A.,
79 Avenue des Champs-Elysees,
Paris, (8e) France.

Mr. Kurt Gutekunst
Compagnia Generale di Electtricita
Via Borgognone, 34
Milan (124) Italy.

Warchalowski, Reckzugel & Co.
Paulusgasse, 3
Vienna, Austria.

(Mail to arrive before June 1)
Mr. Ulrich von Kremski, Mgr.
Frigidaire G. M. b. H.
Wiebestrasse 12,
Berlin, N.W. 87, Germany.

Editor's Hosts on His One-Day Stop in Auckland

During the course of his busy 16-hour stay in Auckland, New Zealand, Editor George Taubeneck was guest of leading refrigeration men of the city at a luncheon in the Station Hotel. Here they are shown in an after-luncheon toast, with the editor (extreme left) toasting their health as they drink to the success of his trip.

POTTER

Potter Refrigerator Corp., Buffalo, N. Y.

Trade name	Childare		Potter				
Model No.	C-46	C-66	L-66	L-86	D-106	D-136	D-156
Compressor Model No.	ABU	ABU	AD	AD	AD	AD	AD
PRICE							
Retail price, installed	$109.00	$139.00	$179.00	$239.00	$259.00	$319.00	$389.00
Cabinet finish, exterior	Dulux						
CABINET DIMENSIONS							
Overall height (inches)	53¼	58⅜	58⅜	67	57¾	63¼	65½
Overall width (inches)	23⅝	30¼	30¼	30¼	29½	29½	33½
Overall depth (inches)	24½	25½	25½	25½	25¾	25¾	25¾
					*G.S. F.S.	G.S. F.S.	G.S. F.S.
Inside height (inches)	26⅜	29⅜	29⅜	37⅝	16¾ 9	22¼ 9	22¼ 10½
Inside width (inches)	18⅜	23⅝	23⅝	23⅝	24 20	24 20	28 24
Inside depth (inches)	16¾	16¾	16¾	16¾	16⅛ 15⅛	16⅛ 15⅛	16⅛ 15⅛
Number of doors	1	1	1	1	1	1	2
STORAGE CAPACITY							
Net food storage (cu. ft.)							
Number of shelves	4	5	5	8	5	6	6
Total shelf area (sq. ft.)	8.26	13	13	15.4	10.3	13	15
Cabinet finish (interior)	Porcelain						
INSULATION					*G.S. F.S.	G.S. F.S.	G.S. F.S.
Top (thickness in inches)	2⅝	3⅛	3⅛	3⅛	3 2	3 2	3 2
Sides	2⅝	3⅛	3⅛	3⅛	2¾ 4¾	2¾ 4¾	2¾ 4¾
Back	2⅝	3⅛	3⅛	3⅛	2¾ 4¾	2¾ 4¾	2¾ 4¾
Door	2⅞	3½	3½	3½	3¾	3¾	3¾
Bottom	2⅝	3⅛	3⅛	3⅛	2 5	2 5	2 5
ICE CUBES							
Number of shallow trays	3	3	3	5	3	3	4
Number of deep trays	0						
Total number of cubes	54	84	84	140	84	84	112
Total wt. of cubes (lbs.)	3.3	6	6	..	6	6	8
COMPRESSOR							
Ice melting effect 24 hrs.	96	96	175	175	175	175	175
Motor horsepower	1/6	1/6	1/5	1/5	1/5	1/5	1/5
Refrigerant in system (lbs.)	1	1	1½	1½	1½	1½	1½
Quantity of lubricant (pts.)	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Belt circumference (inches)	33¾						
Belt width (64ths of inch)	34						
WEIGHT							
Net weight (lbs.)							
Shipping weight (lbs.)	303	400	410	430	470	485	560

COMPRESSOR

Compressor Model No. ABU—single cylinder, 430 r.p.m., 1½-in. bore, 1¼-in. stroke.

Compressor Model No. AD—twin cylinder, 400 r.p.m., 1½-in. bore, 1¼-in. stroke.

Made by Universal Cooler, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, bellows.

Refrigerant, Arctic methyl chloride. Lubricant, Argon oil.

CABINET

Made by Leonard Refrigerator Corp., (C-46, C-66, L-66, L-86). Sitka spruce frame with Hermetex insulation, Bakelite breaker strip, rubber gasket.

Models D-106, D-136, D-156 have cabinets made by Rex Mfg. Co., sitka spruce frame, Balsam Wool insulation, Tylac breaker strip, rubber gasket.

HARDWARE

Made by Grand Rapids Brass of brass with chromium finish.

MOTOR

Capacitor-type made by Wagner. Oil every three months.

CONDENSER

Made by Long Mfg. Co., fan cooled, finned tube.

EVAPORATOR

Made by Potter, of copper-brass-aluminum, continuous coil in sleeve type on Models C-46 and C-66; first evaporator, coil in sleeve, second evaporator, large area fin coil on L-66, L-86, D-106, D-136, and D-156.

American Radiator expansion valve refrigerant control.

Aluminum ice trays. One rubber grid with each model.

CONTROL

Ranco adjustable temperature control mounted inside the cabinet, model KR520, having wide-cycle defrosting with vacation cycle on C-46, C-66, L-66, and L-86.

Models D-106, D-136, and D-156 have Ranco non-adjustable temperature control mounted outside the cabinet, model KR519, no defrosting necessary, vacation cycle provided.

Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year.

Serviced by: Dealer.

Replacement parts are sold to independent service companies.

SPECIAL FEATURES

*G.S. General food storage compartment.
F.S. Frozen storage compartment

WARD

Montgomery Ward, Chicago, Ill.

Model No.	S400	S550	E6610	P6625	6620	6820	6120
Compressor Model No.	10750	10750	10750	10750	10225	10225	10225
PRICE							
Retail price, installed	$94.95	$104.95	$114.95	$134.95	$154.95	$169.95	$254.95
Cabinet finish, exterior	Dulux			Porc.	Dulux		
CABINET DIMENSIONS							
Overall height (inches)	50¼	53¼	55¾	55¾	58	62	62
Overall width (inches)	23⅞	27⅜	30	30	30	33	42½
Overall depth (inches)	20½	23½	25	25	23¼	23¾	22¾
Inside height (inches)	26¾	28⅝					
Inside width (inches)	18⅞	20⅞					
Inside depth (inches)	15½	17⅛					
Number of doors	1	1	1	1	1	1	2
STORAGE CAPACITY							
Net food storage (cu. ft.)	4.0	5.65	6.33	6.33	6.73	8.8	12.
Number of shelves	3	4	4	4	5	6	..
Total shelf area (sq. ft.)	7.5	11.0	13.0	13.0	14	19	26
Cabinet finish (interior)	Porcelain						
INSULATION							
Top (thickness in inches)	2	2½	3	3	3	3	3
Sides	2	2½	3	3	3	3	3
Back	2	2½	3	3	3	3	2
Door	2½	2½	3	3	3	3	3
Bottom	2	2	3	3	3	3	3
ICE CUBES							
Number of shallow trays	3	3	2	2	3	5	6
Number of cocktail trays	0	0	2	2	2	2	0
Total number of cubes	54	63	84	84	90	128	144
Total weight of cubes (lbs.)	4	5	6	6	8	13	16
COMPRESSOR							
Ice melting effect 24 hrs. (lbs.)	94	94	96	96	150	150	230
Motor horsepower	1/6	1/6	1/6	1/6	1/5	1/5	1/3
Quantity of lubricant (oz.)	16	16	20	20	20	28	28
Refrigerant in system (oz.)	11	11	11	11	8	10	10
Belt circumference (inches)							
Belt width (64ths of an inch)	44						
WEIGHT							
Net weight (lbs.)	270	300	375	410	425	475	520
Shipping weight (lbs.)							

COMPRESSOR

Made by ————————, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. 10750—single cylinder, 387 r.p.m. in Models S400 and S550; 410 r.p.m. in E6610 and P6625; 1½-in bore, 1¼-in stroke.

Compressor Model No. 10225—twin cylinder, 500 r.p.m. in Models 6620 and 6820; 540 in Model 6120; 1¼-in. bore, $1\frac{7}{16}$-in. stroke.

Refrigerant, methyl chloride in 10750; sulphur dioxide in 10255. Lubricant, Sun Oil Co.

Shaft seal, bellows.

CABINET

Made by Seeger (S-400, S-550, 6620, 6820, 6120), Leonard (E6610, P6625).

Models S-400, S-550, E6610, P6625—wood frame with Hermetex insulation and Panelyte breaker strip.

Models 6620, 6820, 6120—steel frame with Balsam Wool insulation, and Insurock breaker strip.

Balloon rubber gasket.

HARDWARE

Made by ————————. Brass with bright chrome finish.

MOTOR

Condenser-start type made by Delco. Oil semi-annually.

CONDENSER

Made by ————————; fan cooled; square fin condenser (S-400, S550), continuous tube wrinkle fin condenser, (E6610, P6625), steel—copper brazed condenser (6620, 6820, 6120).

EVAPORATOR

Made by ————, wrapped copper coil (S-400, S-550), wrapped copper coil with humidifying baffle (E6610, P6625), fabricated brass, (6620, 6820, 6120).

Detraoit Lubricator expansion valve refrigerant control (S-400, S-550, E6610, P6625), high-side refrigerant control, (6620, 6820, 6120).

Anodic aluminum and rubber ice trays. Rubber grid and cocktail trays (E6610, P6625), tray release (6620, 6820, 6120).

CONTROL

Tagliabue (S-400, S-550), Ranco (E6610, P6625), ——— (6620, 6820, 6120), adjustable temperature.

Tagliabue model R18; Ranco model KRL477; —— Model 1124143 (YJ), mounted inside cabinet.

Wide-cycle defrosting on S-400, S-550, E6610, P6625 and semi-automatic defrosting on 6620, 6820, 6120.

Vacation cycle on E6610, P6625, 6620, 6820, 6120.

Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: Five-year protection plan.

Serviced by: Factory-trained service men.

Replacement parts are not sold to independent service companies.

Refrigeration and Air Conditioning Supplies

Throughout the Americas, Europe, Asia, Africa and Australia our thorough knowledge of markets, our prompt and efficient service, high quality products and attractive prices have enabled us to become recognized LEADERS in REFRIGERATION and AIR CONDITIONING supplies and equipment.

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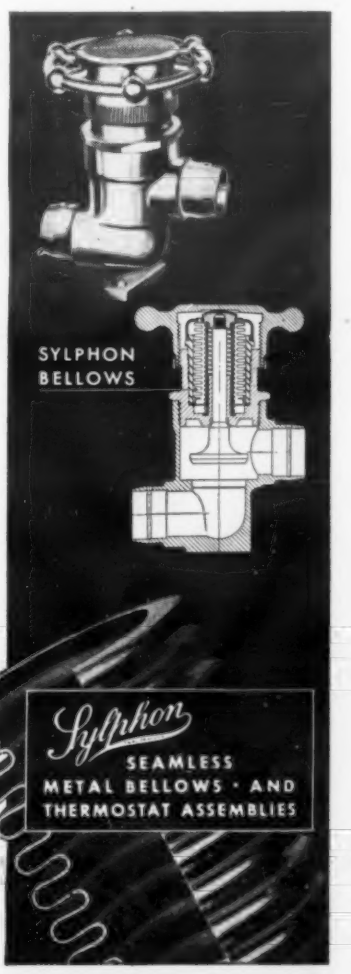
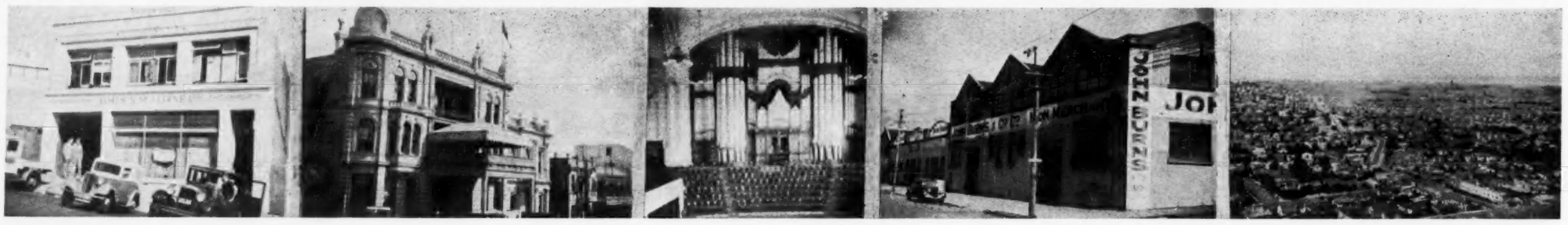
The Mueller Brass Company, recognized pioneers in the manufacture of high quality valves and fittings for mechanical refrigeration, quite logically turned to Fulton Sylphon, the pioneers and originators of the seamless metal Bellows, for the finest packless valve gland they could buy.

For this the most highly developed metal diaphragm in the world, is the result of 35 years of research and experience in manufacture and correct application. It has been time-tested beyond doubt in the products of the leaders in the refrigeration industry. Its quality is a known quantity for which you pay no premium. Write for Bulletin HO-121. Sent on request.

FULTON SYLPHON Co.
KNOXVILLE, TENN., U.S.A.



Tourist's-Eye View of Auckland's Refrigeration Offices and Scenic Spots



(1) The office of James S. McAlpine, Ltd., refrigeration engineer and jobber of replacement parts and refrigerants. (2) Grand Hotel, Auckland, one of the chain of which Desmond Davis, partner in the McAlpine company, is part-owner. (3) The mighty organ in Auckland's Town Hall. (4) Warehouse of John Burns & Co., Ltd., distributor for Brunner and Froskist commercial and Sanitary domestic refrigerators. (5) Auckland as seen from atop One Tree Hill.

(*Concluded from Page 32, Column 5*)
or could be soaped into activity, like the geysers.

* * *

Bright Maoris

Perhaps the best-brained of all the Polynesians, the native Maoris of New Zealand are held in high esteem by the Dominion's English population. As in Hawaii, intermarrige between whites and Maoris is not frowned upon, and the native race is respected and admired.

Taking to education like they take to water, members of this healthy, dexterous race are taking seats in the New Zealand parliament, and are assuming prominent positions in all walks of life.

The ancestors of the Maoris settled New Zealand as far back as the fifteenth century, records show. They came in canoes, on some of those scarcely-believable canoe voyages which the Polynesians conducted across thousands of miles of the Pacific Ocean for centuries before the first European navigators adventured on those waters.

Vigorous and bright, they rowed these canoes with uniform precision, like a college sculling crew, Capt. Cook reported.

Imaginative, they developed a romantic mythology surrounding and explaining the natural wonders among which they lived. Notwithstanding their deification of the scenery, they made practical use of the hot-water pools for bathing, clothing washing, and cooking—which they still do, in the Rotorua region.

They have no fear of the geysers or steam jets (which are really safety valves for this volcanic region), and permit their children to play among them without the least misgivings.

Odd carvings and embellished scrolls left by Maori artists remind one of today's ultra-modern impressionistic school of sculptors and painters. Maybe our hair-in-the-eyes lads got their big idea from these old Maoris.

Like the Hawaiians, the Maoris have sweet voices, and sing well in harmony. A Maori chorus is something to hear—much more than a Maori dance is to see.

Maori canoes, carvings, and other relics are well museumed in Auckland. Their inland homes may be seen along with the scenery by taking regulation motor tours, or by riding the government railroads—which are marvels of civil engineering, spiraling and serpentining their way through gorges, rivers, mountains, and lakes, with long bridges and tunnels, including the five-miles-long Otira tunnel through the Southern Alps, through which electric locomotives climb and drop 1,200 feet.

* * *

Maoris as Fighters

Among the best troops in the World War were 2,200 native Maoris from New Zealand. Natural fighters, resemblant physically to the North American Indians, descendants of men who had voyaged thousands of miles on individual trips in slim canoes, the Maoris were both ferocious and resourceful in battle.

In New Zealand we were told that many decades before Armageddon the Maoris had taught the British how to fight from trenches—an art hitherto new to the science of capitalized mass murder.

Because these Maoris found no animal life on New Zealand, cannibalism developed to some extent. Tribal jealousies were rampant, and internecine warfare almost continual. They fought hand-to-hand, with clubs and stone weapons.

* * *

Artists and Mystics

Worshippers of the stars and the heavens, they develop a complicated religion and attendant mythology, with a system of inviolable *tapus* and revered priest-doctors.

Their religious lore was handed down to succeeding generations in the form of oral poetry, and was celebrated in wood-carving and rafter murals, and gracefully-patterned weaving.

Farmers, hunters, athletes, fighters, navigators, ceremonialists, woodsmen, artists, mystics, the men left the quiet forms of toil to their women, just as did the American Indians.

Today in the Tuhourangi district at Whakarewarewa you can still see women weaving flax for clothing, plaiting flax for baskets, and engaged in primitive methods of cooking and clothes washing in the hot springs.

The popular-among-Maori-women headband, termed the *pare,* reminds one of Navajo American Indian designs. It is woven of finely-spun flax.

Tourists generally see two Maori dances. Women dance the *poi,* chanting and swinging about a light ball at the end of a string. Men dance the *haka,* which is a sort of calisthenic drill accompanied by frightful shouting.

Maori folk still greet one another with the *hongi,* or nose salute. They do not rub noses, but press them together gently, accompanied by a murmur signifying their mood.

* * *

Pastoral Land

Thus far New Zealand is chiefly a country of grassland farming. Native tussock land on South Island is used to graze sheep, and on both islands large areas of forestland have been cleared and sown with European grasses.

Maoris have also tilled highly fertile soil for the sowing of cereals (wheat and oats). Refrigerated ships, it may be noted, have played a large part in developing of New Zealand's dairy trade, much of which has come about since the World War.

Extensive areas of bushland are awaiting settlers and reclaiming.

Gold mining is profitable in New Zealand, coal is present in commercial quantities, and indications of oil have been found in several likely places.

Cheap hydro-electric power, cheap rail transportation, and protective tariffs are aiding the development of local manufacturing.

* * *

16-Hour Day

To be snatched out of the calm, peaceful life on board a ship sailing through the tropics, and to be whisked away for 16 hours of rushing by a highly energetic, highly social group of Auckland business men, is an experience which will test the reserve strength of your cardiac fibres.

It happened to us, and nothing which has happened to us in recent years has brought home to us so clearly the sad fact that we are Growing Old.

A half dozen of these Bounding Britons boarded the *Mariposa* from a private yacht (which nearly everyone around Auckland seems to have) sometime near that period when dawn is supposed to crack, and in the jolliest of all possible moods rousted us out of bed.

Headed by GUY D'ELSA of John Burns & Co., Ltd., JAMES S. McALPINE, installation and service engineer, and his partner, DESMOND DAVIS, these jovially jocular men proceeded to steam up our spirits until the boat docked, after which they whirled us through 16 hours of factory inspections, office visiting, sightseeing, dining, drinking, and conversation, without a single complaining.

Not that we're complaining, mind you. Because of their zeal and diligence, we must have compressed a week's visit to New Zealand into one long day. What's more, they were swell people.

* * *

His Worship

High spots of the day were a luncheon tendered us by the refrigeration executives of Auckland at the new Station Hotel, and a visit with His Worship, the Mayor of Auckland, the Hon. ERNEST DAVIS.

No ordinary mayor, he. Mr. Davis is the sort of man who would be the non-titled power-behind-the-throne in an American municipality. Here he has the name as well as the game.

Controlling all the hotels in Auckland and many elsewhere in New Zealand, owning the biggest brewery and the largest wine and spirit importing business, an extensive real estate holder, and having a finger in nearly every commercial pie of the isthmus, Mr. Davis is probably the wealthiest and most influential citizen of New Zealand.

What's more, he seemed to us to have the keenest mind and readiest tongue for unforgettable phrases we've encountered outside of Chief Justice of the U. S. Supreme Court CHARLES EVAN HUGHES.

Mr. Davis welcomed us regally, chastised us verbally for not staying longer in New Zealand, offered us the use of a plane to the scenic Rotorua district, and presented us with an autographed, inscribed book which we shall treasure always.

* * *

Year in a Day

At the luncheon the various representatives agreed that about 800 household electric refrigerators had been sold thus far in Auckland, and probably twice as many in the rest of New Zealand.

Commercial installations outnumber household in New Zealand, totalling nearly 5,000, of which 3,000 are in Auckland alone.

No air-conditioning installation had been made in New Zealand at the time we were there.

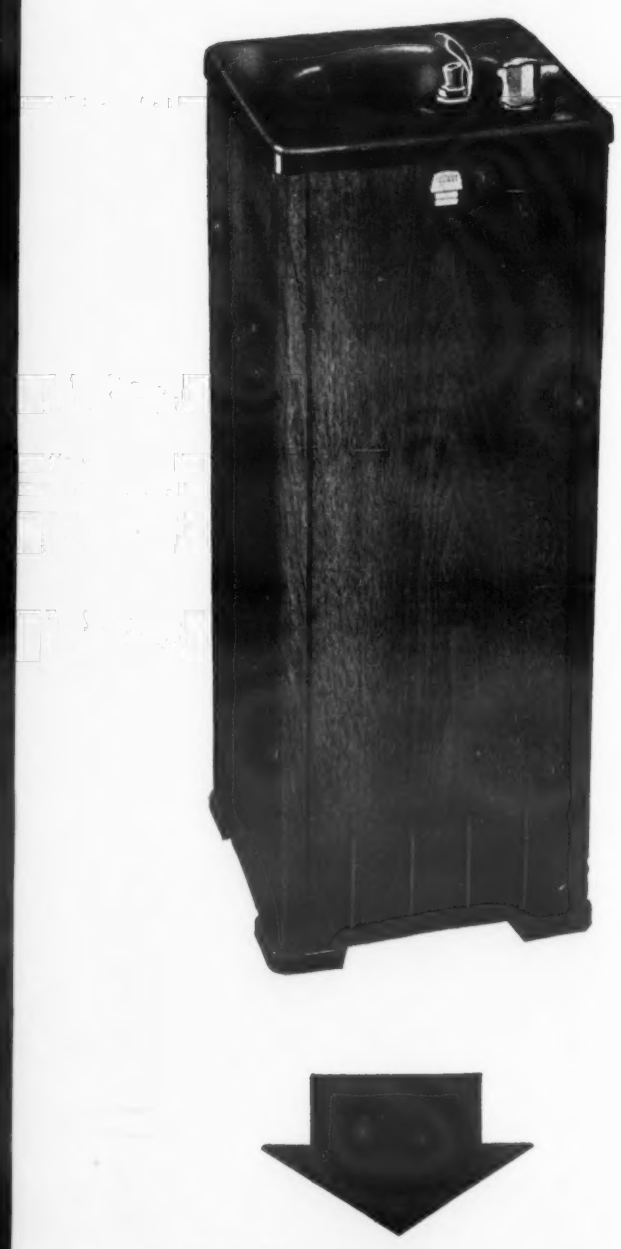
Ice, which costs a cent a pound, has been pushed almost out of commercial existence by electric refrigeration equipment.

The rather odd climate is blamed by New Zealand refrigeration men for the comparatively low saturation point of their market, and for the lack of interest in air conditioning.

Year-'round average temperature is 70° F. It's never cold in winter, seldom too hot in summer. Really, though, there are no seasons as we know them. Rather, Auckland experiences almost every day the whole gamut of weather and climatic conditions available to that part of the southern hemisphere—rain and shine, cool and warm, muggy and vitalizing.

The Mayor

George Taubeneck is welcomed to New Zealand by the Hon. Ernest Davis, mayor of Auckand, brewer, wine and spirit merchant, and largest hotel owner on the North Island.



THESE *Profits* STICK

THE kind of profits you are interested in are those that *stick.* Refrigeration dealers handling Cordley Electric Water Coolers not only make a profit on every sale—a generous one, too—but it isn't eaten up by service costs. Further, these sales are the sort that make friends. Which is another and more important profit, one of a permanent nature, the good-will that will build a prosperous future for your business.

The best evidence of the satisfaction that Cordley Electric Water Coolers will give you is what others have to say. Here are a few typical excerpts from letters we are constantly receiving:

"We find the Cordley Electric Cooler a superior cooler . . . requires very little upkeep." "These coolers have been 100% at all times." "Are so satisfactory and economical to operate that . . . we will specify Cordley only." "Have had favorable comments from all our customers." And from service organizations, "Our experience with your cooler has been most satisfactory. Accessibility makes service economical to handle." "Service and repairs are very light."

Cordley Equipment is ideal for reaching the large market that exists for water coolers, a market that is ready and waiting for you. With these attractive units you can obtain extra sales and extra profits . . . for they are compact, efficient, durable . . . the product of an organization with nearly a half century's experience in the water cooler business. Write now for full details of the Cordley proposition and a complete description of the coolers. CORDLEY & HAYES, 145 Hudson St., New York, N.Y.

Cordley Equipment can increase your profits

THIS SEASON!

If you intend to take advantage of the opportunity for extra profits that Cordley Water Coolers offer, *do it now.* Find out all the details before you are in the midst of your prime selling season, too busy to give time or attention to this important sales outlet. We'll gladly send you full information on request . . . but don't delay!

CORDLEY *Electric* WATER COOLERS

APEX

Apex Electric & Mfg. Co., Cleveland, Ohio.

Model No.	A-430	A-600	A-650	A-785
Compressor Model No.	RG5	RG5	RG5	RG6
PRICE	Zone A Prices			
Retail price, installed	$112.50	$143.00	$184.50	$225.25
Cabinet finish, exterior	Dulux			
CABINET DIMENSIONS				
Overall height (inches)	51⅞	54¾	55⅞	59⅝
Overall width (inches)	23¾	28⅜	32⅜	32⅜
Overall depth (inches)	22⅝	24½	25⅝	25⅝
Inside height (inches)	26	28¼	27	32½
Inside width (inches)	19	22⅜	25¼	25¼
Inside depth (inches)	16⅞	18⅜	18⅜	18⅜
Number of doors	1			
STORAGE CAPACITY				
Net food storage (cu. ft.)	4.30	6.00	6.50	7.85
Number of shelves	3	3	2½	3½
Total shelf area (sq. ft.)	9.3	12.1	12.4	16.3
Cabinet finish (interior)	Porcelain			
INSULATION				
Top (thickness, inches)	2	2½	3	3
Sides	2	2½	3	3
Back	2	2½	3	3
Door	2	2½	3	3
Bottom	2¼	2¾	3⅜	3⅜
ICE CUBES				
Number of shallow trays	2	2	2	4
Number of deep trays	0	1	1	1
Total number of cubes	56	87	87	135
Total wt. of cubes (lbs.)	4.4	6.6	6.6	10.6
COMPRESSOR				
Ice melting effect 24 hrs.	90	110	110	135
Motor horsepower	1/6	1/5	1/5	1/5
Compressor speed r.p.m.	460	520	520	350
Refrigerant in system	4½ to 5¼ lbs.			
Amount of lubricant oz.	10	10	10	14
Belt circumference (in.)	38½			
Belt width (64ths)	40			
WEIGHT				
Net weight (lbs.)	265	310	340	370
Shipping weight (lbs.)				

COMPRESSOR

Made by Apex, open, reciprocating, belt-driven compressor located below food compartment.

Compressor Model No. RG5—single cylinder, 460 r.p.m. on model A-430 and 520 r.p.m. on models A-600 and A-650, 1⅜-in. bore, 1½-in. stroke.

Compressor Model No. RG6—twin cylinder, 350 r.p.m., 1⅜-in. bore, 1½-in. stroke. May be installed in models A-600 and A-650 at nominal additional cost.

Refrigerant, sulphur dioxide. Lubricant, Sun Oil Co.

Shaft seal, balanced.

CABINET

Made by Rex Mfg. Co. Wood and steel frame with Balsam Wool insulation, Tylac breaker strip, Miller rubber gasket.

HARDWARE

Made by National Lock Co. and Winters & Crampton. Chrome-plated finish.

MOTOR

Capacitor type made by Apex, Delco, and G-E.
Oil every 6 months.

CONDENSER

Long Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR

Made by Mullins Mfg. Co., porcelain on pressed steel. Low side float refrigerant control. Aluminum ice trays with one rubber tray in A-600, A-650, A-785. Tray-Jack release.

CONTROL

Penn adjustable temperature control, type 201, model TAC and TADDC, mounted inside the cabinet. Wide-cycle defrosting with vacation cycle on models A-430 and A-600.

Semi-automatic defrosting with vacation cycle on models A-650 and A-785. Hand reset bimetal overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year with four years additional available at slight extra charge.

Serviced by: Authorized dealers and factory branches. Replacement parts are sold to approved independent service companies.

SPECIAL FEATURES

Acid resisting porcelain bottom. Electric light on models A-600, A-650, A-785. Shelf-X shelves, vegetable and bottle storage on A-650, A-785. Set consisting of "Food Finder" drawer, vegetable crisper, three economy dishes, and refrigerator set available for A-650, A-785 at nominal extra cost.

ZEROZONE

Zerozone Refrigeration Co., Detroit, Mich.

Model No.	Z-436	Z-736	Z-936
Compressor Model No.	C2-16	C2-16	C2-20
PRICE			
Retail price, installed	$119.50	$199.50	$249.50
Cabinet finish, exterior	Lacquer		
CABINET DIMENSIONS			
Overall height (inches)	54⅜	58	61½
Overall width (inches)	23⅞	30⅛	32⅞
Overall depth (inches)	23	26¾	26⅛
Inside height (inches)	26⅝	30	33½
Inside width (inches)	19½	23¾	26½
Inside depth (inches)	16¼	19⅛	18½
Number of doors	1		
STORAGE CAPACITY			
Net food storage (cu. ft.)	4.5	7.10	9.01
Number of shelves	3	4	5
Total shelf area (sq. ft.)	8.5	14.0	17.4
Cabinet finish (interior)	Porcelain		
INSULATION			
Top (thickness in inches)	2	3	3
Sides	2	3	3
Back	2	3	3
Door	2½	3	3
Bottom	2	3¼	3¼
ICE CUBES			
Number of shallow trays	3	2	2
Number of deep trays	0	2	1
Total number of cubes	63	98	126
Total weight of cubes (lbs.)	6	9	11
COMPRESSOR			
Ice melting effect 24 hrs. (lbs.)	115	115	138
Motor horsepower	1/6	1/6	1/5
Refrigerant in system (lb.)	1	1	1
Quantity of lubricant (pt.)	7/8	7/8	7/8
Belt circumference (inches)			
Belt width (64ths of an inch)			
WEIGHT			
Net weight (lbs.)	280	335	370
Shipping weight (lbs.)			

COMPRESSOR

Made by Zerozone, open, reciprocating, belt-driven compressor located below food compartment. Bellows shaft seal.

Compressor Model No. C2-16—twin cylinder, 420 r.p.m., 1¼-in. bore, 1⅛-in. stroke.

Compressor Model No. C2-20—twin cylinder, 490 r.p.m., 1¼-in. bore, 1⅛-in. stroke.

Refrigerant, methyl chloride. Lubricant, Suniso.

CABINET

Made by Truscon. Steel frame with Thermocraft insulation, Panelyte breaker strip, rubber gasket.

HARDWARE

Made by Grand Rapids Brass. Brass, chromium finish.

MOTOR

Capacitor-start type made by Delco and Emerson. Oil semi-annually.

CONDENSER

Made by Long Mfg. Co., fan cooled, finned tube condenser.

EVAPORATOR

Made by Mullins, of steel, dry expansion type evaporator. Detroit Lubricator expansion valve refrigerant control. Aluminum ice trays. Rubber tray in Z-736 and Z-936.

CONTROL

Cutler-Hammer and Penn adjustable temperature control Model No. ——— mounted inside the cabinet. Wide-cycle defrosting with vacation cycle. (Cutler-Hammer) hand reset solder pot, and (Penn) hand reset bimetal overload protector.

POLICY

Guarantee on cabinet: One year.

Guarantee on system: One year warranty—four-year replacement contract.

Serviced by: Distributors and dealers.

Replacement parts are sold to independent service companies in some territories.

ELECTRO-KOLD

E. S. Mathews, Inc., 5151 Port St., Spokane, Wash.

Model No.	42	55	72	86	99
Compressor Model No.	Dulux				
PRICE					
Retail price, installed					
Cabinet finish, exterior					
CABINET DIMENSIONS					
Overall height (inches)	47⅜	51⅞	53⅛	60⅜	60⅜
Overall width (inches)	23½	24¼	28½	29½	33⅞
Overall depth (inches)	20¾	23	25	25½	25½
Inside height (inches)	25	28⅞	29⅞	35	35
Inside width (inches)	18¾	20	23¼	23¼	25⅞
Inside depth (inches)	15½	16⅝	17⅞	17¾	17¾
Number of doors	1	1	1	1	
STORAGE CAPACITY					
Net food storage (cu. ft.)	4	5.25	6.7	8.4	8.7
Number of shelves					
Total shelf area (sq. ft.)	8.5	11.04	14.5	17.2	20.25
Cabinet finish (interior)	Porcelain				
INSULATION					
Top (thickness in inches)	1½	2½	2½	3	3
Sides	2	2	2½	3	3
Back	2	2	2½	3	3
Door	2	2	2½	3	3
Bottom	2	2	2½	3	3
ICE CUBES					
Number of shallow trays	2	4	5	6	7
Number of deep trays	0	0	0	1	1
Total number of cubes	36	58	77	133	133
Total weight of cubes (lbs.)	2.7	4.5	7	11.5	11.5
COMPRESSOR	96	96	96	180	180
Ice melting effect 24 hrs. (lbs.)	1/6	1/6	1/6	1/5	1/5
Motor horsepower	1	1	1	1	1
Refrigerant in system (oz.)	⅔	⅔	⅔	⅔	⅔
Quantity of lubricant ( )					
Belt circumference (inches)					
Belt width (64ths of an inch)					
WEIGHT					
Net weight (lbs.)	190	365	400	420	460
Shipping weight (lbs.)					

COMPRESSOR

Compressor on models 42, 55, and 72—single cylinder, 430 r.p.m., 1½-in. bore, 1¼-in. stroke.

Compressor on models 86 and 99—twin cylinder, 400 r.p.m., 1½-in. bore, 1¼-in. stroke.

Made by Universal Cooler, open, reciprocating, belt-driven compressor located below food compartment. Shaft seal, bellows.

Refrigerant, methyl chloride. Lubricant, Argon.

CABINET

Made by Sanitary. Wood frame with Hermetex insulation, Saniwood breaker strip, rubber gasket.

HARDWARE

Made by Winters & Crampton. Chromium finish.

MOTOR

Capacitor type made by Delco. Oil semi-annually.

CONDENSER

Made by ——— fan cooled, radiator type condenser.

EVAPORATOR

Made by Universal Cooler. Copper and brass, direct expansion evaporator. Temperature and expansion valve refrigerant control, Detroit expansion valve. Copper and aluminum ice trays. Metal and quick release type.

CONTROL

Ranco adjustable temperature control. Model No. ———, mounted inside the cabinet. Semi-automatic defrosting. Hand reset solder pot overload protector.

POLICY

Guarantee on cabinet: One year.
Guarantee on system: One year.
Serviced by: Dealer.
Replacement parts are sold to independent service companies.

SPECIAL FEATURES

All models with interior electric light and larger models with frozen products compartment. Deluxe models with sliding vegetable baskets.

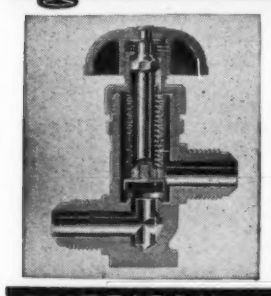
DAYTON *Gives You*

You control your own re-sale prices, selling methods and profits with Dayton. Write for Money-making facts on line and policies.

- Long Discounts
- Interchangeable Snap-On Colors
- Quiet Performance
- DeLuxe Cabinets

HEINZ & MUNSCHAUER
22 Superior St. *Established 1865* **Buffalo, N.Y.**

STANDARD REFRIGERATING APPLIANCES



SOFT SEAT
PACKLESS VALVES

Write for bulletin on complete line covering refrigerating appliances, liquid line filters, dehydrators, acid neutralizers, standard parts and materials, service tools, shaft seals, bearing metals and parts. Descriptive literature will be gladly furnished on any or all of these lines on request.

AMERICAN INJECTOR COMPANY 1481-14th. Street, Detroit, Mich.

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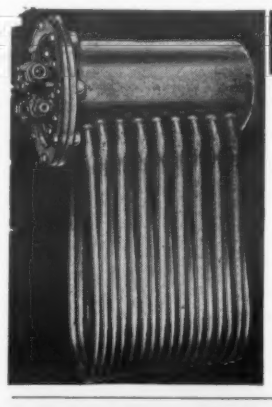
Specifications of refrigerators published in this issue may not be reprinted without authorization and payment of royalty.

AIR-RITE
DEODORIZER
for refrigerators

Keeps refrigerators sweet. Suspend from any shelf. Attractive finish. Size 2½"x3½". To retail for $1. Write for literature and prices.
Address Box 35, Fairview Station.

Walway Co.
DETROIT MICHIGAN



STANGARD STANDS SUPREME

....in the fine art of recalibration of float valves and the silver soldering of evaporation coils . . . for all makes of Ice Cream Cabinets.

WE MANUFACTURE AND REPLACE...Monel Tops • Enamel Panels • Tanks Rims and Rim Sleeves ...all other parts for all make cabinets.

STANGARD PRODUCTS
A Division of Standard Body Corp.
430 E. 104th Street, New York
Write for Details

KASON HARDWARE

Serving Refrigerators the World Over

→ Manufacturers of Fine Refrigerator Hardware ←
KASON HARDWARE CORP., 127-137 Wallabout St., Brooklyn, N.Y.

COMING—COMMERCIAL SPECIFICATIONS ISSUE—MAY 6

Air Conditioning

Free Consultation Service Keynote of Drive By Commonwealth Edison To Get Chicago Merchants Interested in Comfort Cooling

By Phil B. Redeker

CHICAGO—Free consultation service for prospects, a direct mail campaign directed to classified lists, and a smashing newspaper advertising drive are the three principal phases of Commonwealth Edison Co.'s promotional efforts on air conditioning in 1936. Commonwealth Edison, which does not sell air-conditioning equipment, is undertaking the campaign to make Chicago air-conditioning conscious simply as a means of spurring on a market which has, of course, great load-building possibilities.

This year's campaign is not the first one of its type which Commonwealth Edison has conducted; however, it is perhaps the most elaborate, the best planned.

One of the main objectives of this year's campaign, it was explained by Knight C. Porter, air-conditioning engineering and consultant for Commonwealth Edison, was to help the industry level off its seasonal peak of activity by getting those prospects who were interested in comfort cooling to get their installation "started early."

Heat Wave Copy on Zero Day

With this idea in mind, the first newspaper copy used was what at least might be termed "unusual." It appeared on Feb. 20, on one of the coldest of Chicago's many sub-zero days of the past winters, and showed a man mopping his brow against the background of a newspaper which had the following banner headlines:

"Heat Wave Coming." "Scorcher Due." "Soaring Mercury May Reach 99."

Copy theme started out as follows: "Zero weather can't continue all year 'round in Chicago. Only a few months from now and the temperature will be 100 degrees higher than it has been recently. Then you'll want Electric Air Conditioning... now is the time to plan for it. Have a survey made of your requirements and have the installation made before the big rush begins."

The unusual aspects of this advertisement naturally got attention, and drew considerable public comment.

These and the other newspaper advertisements which have appeared this year measure 5 columns by 14 inches.

Later advertisements have emphasized the profit possibilities in commercial applications, and have been directed at particular classifications of establishments.

The reproduction on this page shows one such advertisement designed to attract the attention of the restaurant trade.

The theme "There's Profit in the Air!" is also carried through in other advertisements. Cartoon copy has been used in some of the other advertisements.

Further carrying out the thought of "get your installation early," one piece of copy says: "Get plans and estimates now... hot weather is only a few weeks away."

All advertisements carry a coupon, addressed to the Commonwealth Editor Co., as follows:

"Please furnish, without obligation, information regarding electric air conditioning for my home... store... office... factory." Space is then left for the name, address, and phone number.

Supplementing the general newspaper advertising is a campaign in business and commercial journals serving the Chicago area only.

Direct mail pieces are sent to lists of prospects, individual pieces being prepared for each classification of the market. Names are taken from records of the Commonwealth Edison Co., and from classified directories.

"No attempt was made to 'rate' these lists in terms of apparent ability to buy," explains Mr. Porter. "Installations which have been made in past years have demonstrated the fact that you can't tell whether or not a merchant is a real prospect for air conditioning by looking at his place of business, or checking his credit rating.

Cooling Offers 'Plus' Advantage

"Many establishments that need to modernize along other lines will 'jump over' such preliminary steps and install air conditioning because air conditioning gives them a 'plus advantage' over their competitors, whereas if they had made other improvements it would have only brought them up to the average level of their competitors.

"That's why we're hammering on the profit theme of air conditioning—we know that if we can make the business man realize that in this early stage of the industry it will give him a 'plus advantage' over competitors, he will be interested."

The Commonwealth Edison mailing piece consists of a mimeographed letter, with a yellow and green flap at one side, on the outside of which is printed the message: "Electric Air Conditioning Pays Extra Dividends During Hot Weather" and on the inside of which is shown pictures of a typical installation, together with more copy.

Letters to Store Managers

Typical of one such letter addressed to a merchant is the following:

"Dear Sir:

"Ninety store managers in Chicago know from experience that electric air-conditioning pays big dividends.

"Electric air-conditioning will draw customers to your store during hot Summer months. If they know they can shop in a cool, comfortable store, old patrons will be more regular in their visits, because they will not put off shopping 'until it gets cooler'. New customers will come to you, and as a result may become year-'round customers. Electric air-conditioning will keep out dirt and noises from the street, thus protecting merchandise, and will make your store a clean, quiet place in which to shop.

"If your store is air conditioned it will also help to keep your employees more efficient. They will be more cheerful at their work, will give better service, and will be less fatigued at the end of a day's work.

"Investigate electric air conditioning now before hot weather arrives.

"One of our engineers will, upon request, tell you more about electric air-conditioning for your store. He will advise you which type of equipment is most practical and economical for your needs, and he will give you an estimate of the cost of equipment and the cost of operation. He has nothing to sell and his services are free and without obligation. Mail the enclosed card, or telephone for an appointment."

Letters sent to business executives aimed to get them interested in air conditioning their offices follows a somewhat different theme:

"Dear Sir:

"More than 250 business executives in Chicago know from experience that electric air-conditioning is a paying investment for their concerns.

"Electric air-conditioning keeps offices cool and comfortable in summer. You and your employees can do better work, and be less fatigued at the end of a day's work, if your office is air conditioned. Your office staff will be kept at a high standard of efficiency. With air conditioning, dirt and noises are kept out, making your office a more comfortable place in which to work.

"Air-conditioning also brings relief to those who suffer from pollen asthma and hay fever during the Summer months. In Winter by maintaining proper humidity it helps reduce absence from work on account of illness.

"Investigate the many advantage of electric air-conditioning before hot weather arrives."

Replies Increase 40%

So far this year the direct mail campaign has brought inquiries for consultation service from 238 business men, as compared to 171 for a similar campaign it the same period last year, a gain of 40%, states Mr. Porter.

As those inquiries for information are received by Mr. Porter and William Rock, the other air-conditioning engineer who works with Mr. Porter, they attempt first to find out the extent of the inquirer's interest by means of a telephone conversation, and where the interest is such that it manifests the possibility of action, a personal call is made.

Further qualification of the prospect is made during the personal visit to his establishment. If the inquirer is marked down as a real prospect his name is passed along as a "prospect lead" to contractors in Chicago.

Leads are distrbuted on an equitable, rotating basis, of course. The utility men use their knowledge of the contractors' facilities in giving out leads; naturally, a man who sells only unit coolers would not be given a prospect who wants a central system for a three story building. At least two contractors get leads, in order that there will be some competition on the job.

Lay Ground Work for Sales

The Commonwealth Edison engineers attempt to make the sales task of the air-conditioning contractor easier by laying a groundwork for sales.

"We try to build up 'price acceptance' on the installation by talking, not the price, but the probable profit that will accrue from the installation," states Mr. Porter. "If we can convince him that air conditioning is going to bring increased profits, we don't find it necessary to talk about the possible cost."

The utility men also give the prospect a concept of the size and scope of an installation that will be necessary for his place of business.

Generally speaking, Mr. Porter said, prospects when interviewed by the utility representatives want to know the following about air conditioning:

What Prospects Want to Know

1. *Will it bring tangible returns?* In answering this question the power company men point out that air conditioning if installed today gives the establishment a "plus advantage" in business getting that an installation a few years hence, when they will be more common, won't provide.

2. *What will be the cost?* Mr. Porter or Mr. Rock will give the prospect a general idea of what he must set up to spend on an air-conditioning system, but of course do not make any estimates or cost analysis.

3. *What will it cost to operate?* This is an easy one for the power company men. They're naturally prepared to talk at length on the cost of electricity for operating an air-conditioning system, and they have also made themselves familiar with water costs, in case they should be a factor.

4. *Where can I buy it?* When a prospect finally becomes convinced of the possibilities of air conditioning, he wants to know where he can purchase an air-conditioning system. The power company men explain to him the channels of acquisition.

5. *Do I know anybody that's in the air conditioning business?* Sometimes the prospect has a preference for doing business with one certain kind of the many different classifications of industry that have branched off into air conditioning (electrical, automotive, plumbing and heating, etc.) for either business or personal reasons.

Will Contact Contractor

Finally, if the prospect wishes to be contacted by a contractor, the Commonwealth Edison Co. offers to call the contractors, or gives the prospect names of some companies, whichever procedure is desired. This proves that there are no strings attached to the "free service" which the power company offers.

After such an interview, the utility man phones back in 10 days to see if the prospect has been given reasonable attention by the contractors to whom he was referred.

No attempt, however, is made to pass judgement on any bids, as the Commonwealth Edison does not set itself up as an engineering consultant under any circumstances.

THERE'S PROFIT IN THE AIR!

"It's cool inside!"

the magic words that increase summer profits

973 installations of Air-Conditioning Equipment in Chicago prove the rapidly-growing popularity of this aid to business, health and comfort

plan now to equip *your* place of business with

ELECTRIC AIR CONDITIONING

● Make the most of summer opportunities. Here is a way to increase sales and profits. Install electric air conditioning. Then, when the thermometer skyrockets and outdoor's blistering heat makes every movement uncomfortable, watch the crowds come in. Seeking relief from oppressive heat. Seeking refreshing air and shopping comfort.

Air-conditioned stores attract more business. Enjoy and profit from the sales advantage electric air conditioning provides. Now is the time to get ready... to make plans... to get estimates . . . to determine the best equipment. Summer isn't far off. If you want to cash in this year, get complete information now.

Telephone RANdolph 1200, Local 168, and one of our engineers will give you complete information and cost estimates without obligation. Or mail the coupon below.

COMMONWEALTH EDISON COMPANY
72 West Adams Street, Chicago, Illinois
Please furnish, without obligation, information regarding Electric Air Conditioning for my
HOME ☐ OFFICE ☐
STORE ☐ FACTORY ☐
Name .....
Address .....
City .....
Phone No. .....

COMMONWEALTH EDISON COMPANY
Air-Conditioning Division, Randolph 1200, Local 168

Although Commonwealth Edison does not sell commercial air-conditioning systems, it is promoting the idea with advertisements such as this.

INFORMAL TALK NUMBER 46

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R-A-C-I Trained men are selected for personal fitness . . . given 600 hours of preparatory training in their homes . . . 100 hours of intensive practical training in our own Shops. They are trained as you want them trained.

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90-Ton Frigidaire System Will Cool Baton Rouge Hotel

DAYTON, Ohio—Roy L. Heidelberg, president of the Heidelberg chain of hotels, has placed with Delco-Frigidaire Conditioning Corp., an order for installation of a 90-ton capacity air-conditioning system in his hotel, the Heidelberg, at Baton Rouge, La., it was reported last week by James J. Nance, vice president and general sales manager of Delco-Frigidaire, General Motors' newly formed organization for the marketing of year-round air conditioning and automatic heating epuipment.

The system laid out for the Heidelberg by Delco-Frigidaire engineers provides for complete conditioning of the main lobby, the mezzanine floor, sample rooms, bar, lounge, coffee shop, hotel offices, four complete floors of guest rooms, and a new night club on the roof. Last summer, the dining room and one of the hotel's bars were equipped by Frigidaire.

The system laid out has, at the direction of Mr. Heidelberg, been designed to permit air conditioning of additional guest rooms should the demand for such rooms exceed the number now included.

Delco-Frigidaire's system will involve a series of ducts and special units to meet conditions confronting installations of conditioning equipment in existing buildings.

The Heidelberg caters to state officials and legislators and their families as well as persons who visit Baton Rouge on state business. In addition, Baton Rouge is a tourist center in the south and attracts recreation seekers from New Orleans and other communities.

Freeman Tells of Large Air Cooling Market

PROVIDENCE, R. I.—A potential air-conditioning market of hundreds of millions of dollars was described by E. B. Freeman, president of B. F. Sturtevant Co., Boston, before a meeting of the Providence Engineering Society recently.

Undeveloped markets in this field total $20,000,000 in the theatrical field, $250,000,000 in 140,000 chain stores, $250,000,000 in the drug store field, $50,000,000 in department stores, and $500,000,000 in office building installations of the better grade, according to Mr. Freeman.

Residential installations, however, he placed outside the scope of fair market volume estimating.

Electrical, mechanical, and control equipment of varied design to meet different conditions, and adequate engineering will be important factors in successful installations, Mr. Freeman said.

Spitzley Will Distribute Frigidaire Conditioning Equipment in Detroit

DETROIT—R. L. Spitzley Heating Co. has been appointed distributor for Delco Frigidaire automatic heating and air-conditioning equipment by Delco-Frigidaire Conditioning Corp., newly-formed General Motors Corp. division. The company was formerly distributor for Frigidaire air-conditioning equipment.

Under the new franchise, Spitzley will handle distribution of heating equipment for the entire state of Michigan, and of air-conditioning equipment for the whole state with the exception of those territories covered by Consumers Power Co.

Carrier Appoints New Dealer in Boston

BOSTON—Carrier Engineering Corp. recently appointed Carrier-Boston, Inc., 85 Devonshire St. here, as air-conditioning and refrigerator dealer in this territory.

H. F. Lowe, who has been associated with Carrier Engineering Corp. and its subsidiary, Brunswick-Kroeschell, for the past 16 years, will manage the dealership.

Twenty-four-hour service on all types of equipment sold by the two companies will also be maintained by the new dealer.

The manufacturing company will continue to maintain its Boston office at 1202 Statler Bldg.

Complete G-E System to Be Used in Funeral Home

PORTLAND, Ore.—A dual system, consisting of a General Electric air conditioner and a G-E oil furnace, will be installed in the new $25,000 Hennessey-Goetsch & McGee Funeral Parlors here by the oil burner division of Meier & Frank Co., local dealers.

According to present plans, only the chapel and casket sales room will be connected with the air conditioning and the control will be worked in such a way that the heat in the winter can be diverted entirely to either the air-conditioning plant or to the steam-heated section of the building, which will include the living quarters and office.

The $3,000 system will provide air conditioning for 550 sq. ft., and steam heat for 780 sq. ft. of floor space. B.t.u. capacities are 130,000 per hour for the air-conditioning system, and 275,000 for the steam plant.

Type AA-3 air conditioner will deliver 1,200 cu. ft. of air per hour to the main chapel and 400 cu. ft. to the casket sales room, a total of 1,600 cu. ft. per hour capacity.

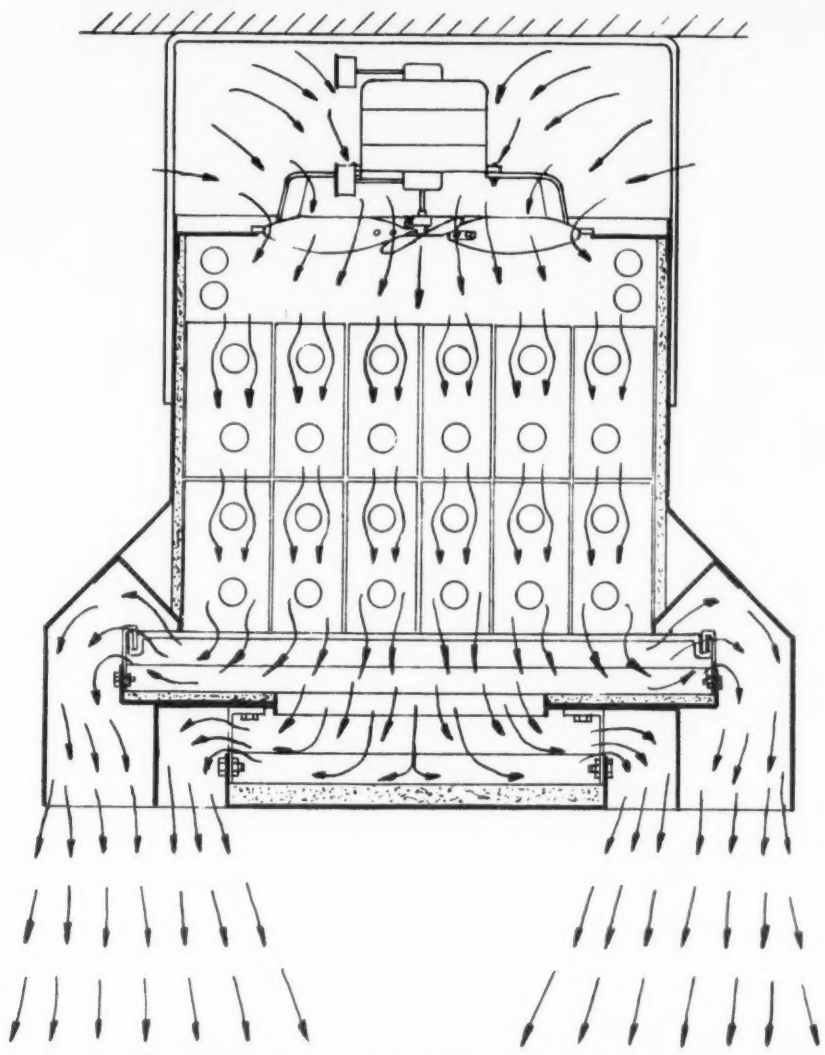
Greensboro Clothing Shop Installs Cooling System

GREENSBORO, N. C. — Pollocks store, a ladies' clothing shop here, is being equipped with a comfort cooling system by Venco, Inc., York distributor.

Equipment will consist of a 20-hp. Freon condensing unit and model C-2000 air conditioner.

Commercial Uses

New Forced-Draft Product Cooler



In the new Vert-E-Fex unit air is taken in at the top by the fan, down over the coils, and out at the bottom, where the direction of the air flow is guided by the special design of the drip pan and the skirted construction.

New Vert-E-Fex Unit Circulates Air Through Forced Down-Draft

CHICAGO—Said by its designers to combine the advantages of gravity circulation (as in double bunkers) with controlled forced draft circulation, a new type of cooling unit for commercial refrigeration applications has just been introduced by Refrigeration Appliances, Inc.

Given the trade-name Vert-E-Fex, the new unit consists of finned cooling surface, encased in a galvaneal cover with a skirt around the bottom, and with two or three small fans mounted on the top.

The unit is mounted, by means of brackets, in the top center of a storage box or meat storage room. Air is taken in through openings in the top of the unit and blown gently down through the coils to the bottom of the cooler, and then spreads out, by gravity flowing up along the side walls to cool merchandise on the upstroke, and then repeating the cycle. (See drawing.)

Construction of the drip-pan is in a "stepped down" effect (as shown in drawing) which in combination with the extension skirt at the bottom, guides the flow of the air and prevents the "short circuiting" of the air back up through the unit.

The directional shields also keep the air paths from conflicting.

The drip pan slides out from its mounting quickly and easily for cleaning purposes.

Motors used to drive the fans are the shaded-pole type of special design, made by the Diehl Electric Co. They are of all-enclosed construction, with the exception of a small hole on the top, through which air is drawn to cool the motor. The special design of the motor is for the purpose of holding speeds which will insure the proper delivery of the air.

Both bearings in the motor are of the ball-bearing type, and are equipped with grease cups. The motors plug in on the side of the unit, in a common socket.

The Vert-E-Fex unit is of insulated construction throughout, to guard against any possibility of "sweating through."

Aluminum fins on copper tubing comprise the cooling surface used in the Vert-E-Fex unit cooler. Plenty of surface is provided because, points out Mr. H. J. Krackowizer, president of the company, the more surface, the less velocity of air is needed.

Another feature of the coil construction is the extra long drier coil which is provided. This is squared around edges of one end of evaporator, instead of being bunched up.

Refrigerant control is through a non-adjustable Detroit Lubricator expansion valve, top-mounted.

Compactness is one of the chief claims which Mr. Krackowizer makes for his new unit. In a 9-cu. ft. storage box it provides a 76-in. clearance, he avers.

Mr. Krackowizer declares that the unit only takes 7% of the total space in a storage box (on a cubical foot basis) as compared with the 25% taken by bunker type construction.

It is also claimed by Mr. Krackowizer that tests in Refrigeration Appliances laboratory have demonstrated that the Vert-E-Fex unit has maintained relative humidities of 83 to 86% with the box temperature held to 34° F.

Georgia Power Co. Did $300,000 Commercial Volume in '35

ATLANTA—A total of $234,956.72 worth of commercial refrigeration equipment and $64,624.70 in water and beverage coolers was sold by commercial appliance salesmen for Georgia Power Co. during 1935, an analysis of the company's commercial appliance sales for the year shows.

Total commercial appliance sales during the year were $370,391.42, with refrigeration and liquid cooling together accounting for almost $300,000 of business. Water-pump sales were $55,193.32,and commercial cooking apparatus sales, $15,616.88.

Axel Ramclaw Joins Mills Refrigerator Division

CHICAGO—Axel E. Ramclaw has joined the engineering staff of the Mills Novelty Co.'s refrigeration department.

Before coming to the Mills Co., Mr. Ramclaw for three years held a similar position with International Harvester Co. Previous to that he was employed as chief engineer of Zerozone Co. for many years.

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Kellogg Introduces New Small Unit

ROCHESTER, N. Y.—Kellog Compressor & Mfg. Corp. has added a ⅛-hp. condensing unit to its line, designed for replacement in household cabinets as well as for small commercial installations.

The unit is compact and light in weight, being available for special applications with an overall height of only 8½ inches, and weighing 44½ lbs. It is small enough to fit into the compressor compartment of most cabinets.

The one-cylinder compressor has a bore of 1 inch and a stroke of ¾ inch. Crankshaft is a special alloy steel forging, heat treated, counterweighted, and dynamically balanced. The motor stator is mounted on the crankshaft, forming one rigid assembly.

Connecting rod is a steel forging, bronze bushed to receive the wrist and crank pins; piston is of a special semi-steel stock, and wrist pin of alloy steel, hollow bored. Bearings are of the sleeve type.

Condenser is of the single pass, single row type, with a radiating surface of 8 sq. ft. Receiver is of copper drawn seamless tubing. Methyl chloride charge in unit is 10 ounces. Dimensions of the complete condensing unit are: height, 10 inches; width, 11¼ inches; length, 13½ inches.

All-Electric Work Center Installed for Fountain

BRISTOL, Va.—Creating an all-electric work center in its soda fountain, the H. P. King Co., department store here, is installing a General Electric super-companion range, two G-E refrigerators, a dishwasher, a glasswasher, and a water heater.

Stultz Buys Viking Refrigerators, Inc.; Plans Expansion

KANSAS CITY—From factory boy to owner is the record of Ernest L. Stultz, who recently took over the ownership of Viking Refrigerators, Inc., manufacturer of commercial refrigerators here.

Arthur S. Bird, active business developer and organizer, who backed Mr. Stultz in the deal, will act as vice-president and treasurer of the newly organized company. George W. Dillon will be secretary, and Mr. Stultz, president and general manager.

The Viking factory in the Blue Valley district, enlarged in 1928, supplies 125 distributors and representatives. A factory force of 80 employees will be enlarged if developments of the new ownership meet present expectations, it was announced.

Started in 1904, the Viking business became a W. S. Dickey activity 30 years ago, after a fire in Kansas City caused its merger into the Western Cabinet and Fixture Co., then at Twenty-first and Harrison Sts. In 1924, the business became Viking Refrigerators, Inc., and two years later the plant of the Kansas City Refrigerator Co. was acquired.

The recent purchase was made from the banks, who came into ownership in the Dickey liquidation.

The new owner, Mr. Stultz, was a factory boy in Western Cabinet plant 30 years ago; bench work, a foremanship, factory superintendent, city salesman, and sales manager were the steps to the top position the plant offered, secretary and general manager in 1923.

5 Stokers Added to Kelvinator Line

DETROIT—Kelvinator Corp. has just added a new five-model line of automatic coal burners to its heating equipment line, reports H. W. Burritt, vice president in charge of sales.

The new burners are mechanical in operation, and can be used with any type of heating system. Included in the new line are two small models and three larger models.

By operating on the underfeeding principle, the new burners provide for the complete combustion of all the fuel, the manufacturer claims. Through this heating method, coal is brought under the fuel bed and preheated, thus liberating the volatile gasses contained in the fuel, which are distilled off, pass through the fire bed, and are ignited, thereby eliminating smoke.

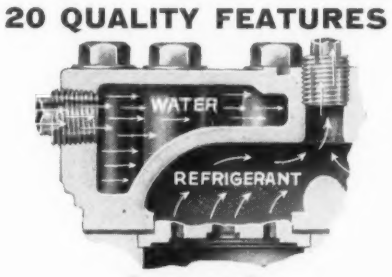
A specially designed tuyere block delivers air to the fuel bed of the burners. Transmission of the burner is of the agitated type, equipped with five speeds and neutral to regulate the fuel feeding to suit temperature conditions.

Safety features of the burner include a limiting device to prevent over-heating of the furnace or boiler, a shear pin of soft steel to protect the mechanism, and an overload protection secured through an automatic resetting overload switch.

Coal feed capacity per hour of the five models range from seven to 150 pounds of coal. The smallest size has a hopper capacity of 350 pounds, while all other models have hopper capacities of 500 pounds.

Merchandising of the new automatic coal burner will be directed by E. V. Walsh, manager of the automatic heating division of Kelvinator Corp., Mr. Burritt announced.

20 QUALITY FEATURES



(No. 9)

Servel's Cored Automotive-Type Heads Insure Long Valve Life and Low Water Consumption

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Success or failure in Commercial Refrigeration and Air Conditioning so often depends on *little things!*

How hard should a wrist pin be?

Should piston rings be bronze or steel?

Should shut-off valves have caps?

What causes "oil slugging"?

A thousand such "little" questions affect the machine performance and the dealers' profits.

Servel engineers proved long ago that a refrigerating machine must be something more than "horsepower — stroke — bore — speed", and Servel dealers have profited by the perfection of the smallest details.

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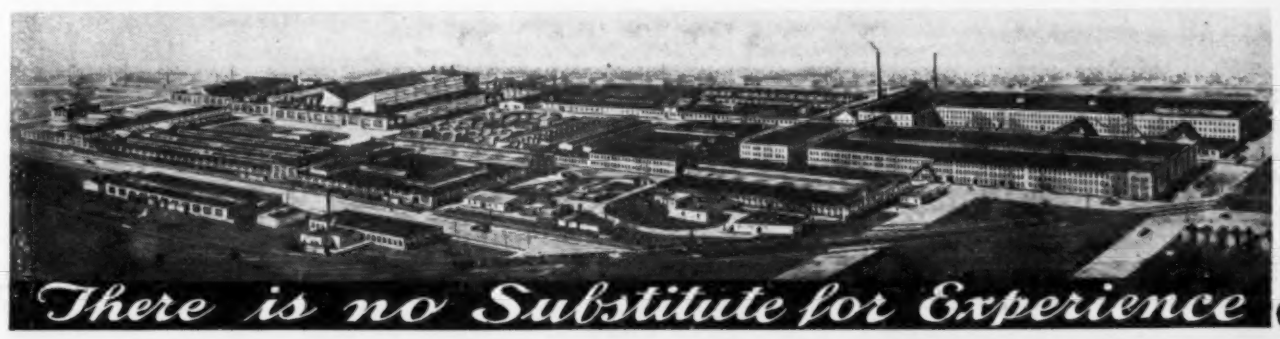
This modern 33-acre plant is the home of Servel Commercial Refrigeration and the world-famous Electrolux, the Servel Gas Refrigerator



Bailey Co. to Handle Marsh Products

LOS ANGELES—Appointment of the Charles M. Bailey Co., Inc., 342 Towne Ave. here as sales representative for the James P. Marsh Corp. to handle the line of Marsh air valves, gauges, thermometers, and industrial instruments, is announced by company officials.

A. W. Merrill, long identified with the heating trade in Southern California, is now associated with Bailey.

Savannah Bag Co. Buys Air-Conditioning System

SAVANNAH, Ga.—Byck Electric Co., York distributor here, is installing a complete year-'round air-conditioning system in the offices of Union Bag and Paper Co.

Equipment will include a 15-hp. Freon condensing unit, and two C-1500 air-conditioning units.

They LAUGHED

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FILTRINE
WATER COOLERS
STORAGE • SHELL & TUBE
BROOKLYN, N. Y.

Patents

Issued March 31, 1936

2,035,499. ABSORPTION REFRIGERATING APPARATUS. Rudolph S. Nelson, Rockford, Ill., assignor to The Hoover Co., North Canton, Ohio, a corporation of Ohio. Application July 17, 1933. Serial No. 680,749. 16 Claims. (Cl. 261—21.)

2,035,543. REFRIGERATING APPARATUS. Richard S. Gaugler, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Feb. 27, 1934. Serial No. 713,235. 8 Claims. (Cl. 62—108.5.)

2,035,573. REFRIGERATING APPARATUS. Harry F. Smith, Dayton, Ohio, assignor, by mesne assignments, to General Motors Corp., a corporation of Delaware. Application Dec. 30, 1930. Serial No. 505,569. Renewed April 10, 1934. 2 Claims. Cl. 62—116.)

2,035,575 REFRIGERATING APPARATUS. Otto M. Summers, Dayton, Ohio, assignor, by mesne assignments, to General Motors Corp., a corporation of Delaware. Application Nov. 3, 1926. Serial No. 145,950. Renewed Nov. 22, 1934. 5 Claims. (Cl. 200—83.)

2,035,628. AIR CONDITIONING APPARATUS. Robert P. Whitmer and William G. Macy, Bloomington, Ill. Application Oct. 25, 1933. Serial No. 695,104. 7 Claims. (Cl. 261—91.)

2,035,653. VENTILATING AND AIR-CONDITIONING APPARATUS. Frederick F. Haskell, Portland, Maine, assignor of two-thirds to Harmon R. Maddocks, Boothbay Harbor, Maine. Application March 10, 1934. Serial No. 714,959. 11 Claims. (Cl. 257—9.)

2,035,654. AIR COOLING APPARATUS. Harold A. Jahrause, Richmond, Ind., assignor to Mutual Air Systems, Inc., Indianapolis, Ind., a corporation of Indiana. Application Jan. 30, 1933. Serial No. 654,198. 3 Claims. (Cl. 62—139.)

2,035,679. ICE CUBE THAWING DEVICE. Joseph Clem Thompson, Lima, Ohio. Application Feb. 13, 1934. Serial No. 711,021. 1 Claim. (Cl. 219—40.)

2,035,710. REFRIGERATION APPARATUS. George A. Leyner and Anthony H. Kelly, Springfield, Mass., assignors to Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., a corporation of Pennsylvania. Application April 26, 1934. Serial No. 722,414. Renewed Sept. 6, 1935. 6 Claims. (Cl. 62—126.)

2,035,728. WATER SUPPLY AND DISTRIBUTION MEANS FOR A HUMIDIFIER. Myles Stanton, Schenectady, N. Y., assignor to General Electric Co., a corporation of New York. Application July 13, 1934. Serial No. 734,975. 5 Claims. (Cl. 299—58.)

2,035,734. REFRIGERATING APPARATUS. Harry M. Williams, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Sept. 25, 1934. Serial No. 745,425. 10 Claims. (Cl. 62—126.)

2,035,755. REFRIGERATION CONTROL MEANS. Virginius W. Moody, New York, N. Y., assignor to Reynolds Metals Co., New York, N. Y., a corporation of Delaware. Application Nov. 30, 1934. Serial No. 755,338. 16 Claims. (Cl. 62—91.5.)

2,055,769. REFRIGERATING MACHINE. Christian Steenstrup, Schenectady, N. Y., assignor to General Electric Co., a corporation of New York. Application June 29, 1934. Serial No. 733,044. 21 Claims. (Cl. 62—116.)

2,035,770. REFRIGERATING APPARATUS. Wilford H. Teeter, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Feb. 28, 1935. Serial No. 8,615. 9 Claims. (Cl. 62—126.)

2,035,786. ROTARY FLUID COMPRESSOR, EXHAUSTER OR CIRCULATING MACHINE. William T. Bradley, Philadelphia, Pa. Application Oct. 17, 1933. Serial No. 693,914. 11 Claims. (Cl. 230—108.)

2,035,814. REFRIGERATION SYSTEM. Floyd L. Kallam, South Gate, Calif. Application March 14, 1932. Serial No. 589,551. 6 Claims. (Cl. 62—115.)

2,035,854. COMPRESSOR. Walter W. Williams, Bloomington, Ill. Application June 11, 1934. Serial No. 730,022. 6 Claims. (Cl. 230—191.)

2,035,953. NONRETURN VALVE FOR USE WITH COMPRESSED OR LIQUID GASES. Ernst Fernholz, Berlin-Tempelhof, Germany. Application Oct. 4, 1934. Serial No. 746,835. In Germany Feb. 7, 1934. 1 Claim. (Cl. 251—115.)

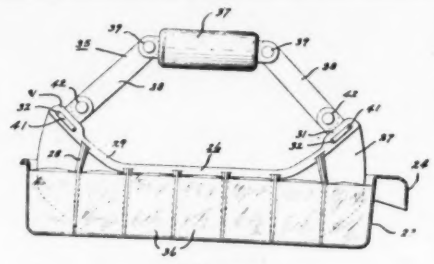
2,035,963. AUTOMATIC LOAD REGULATOR FOR PISTON COMPRESSORS. Alfred Hoerbiger, Mauer, near Vienna, and Emil Schramm, Vienna, Austria. Application March 7, 1932. Serial No. 597,396. In Austria March 11, 1931. 2 Claims. (Cl. 137—139.)

2,036,043. REFRIGERATION. Robert Lay Hallock, Mount Vernon, N. Y. Application May 28, 1932. Serial No. 614,091. 26 Claims. (Cl. 62—108.5.)

DESIGNS

99,103. DESIGN FOR A REFRIGERATOR. Wilbur Henry Adams and Marc Resek, Cleveland Heights, and John A. Dahlstrom, Bay Village, Ohio, assignors to Perfection Stove Co., Cleveland, Ohio, a corporation of Ohio. Application Jan. 30, 1936. Serial No. 60,908. Term of patent 14 years.

99,133. DESIGN FOR A BOTTLE COOLER. Ralph Mattick, St. Louis, Mo., assignor to General Metal Products Co., St. Louis, Mo., a corporation of Missouri. Application Dec. 13, 1935. Serial No. 60,048. Term of patent 14 years.



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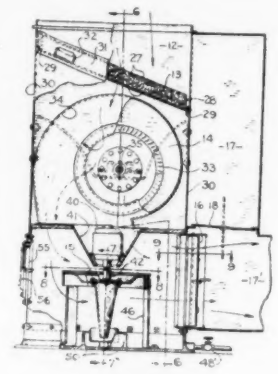

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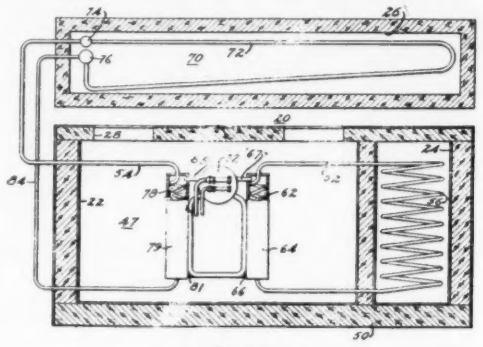

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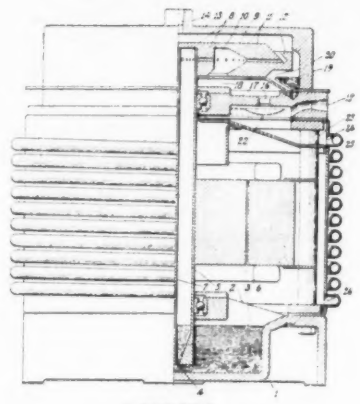

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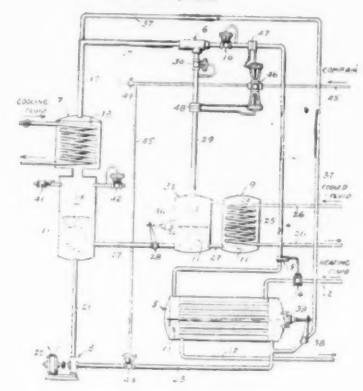

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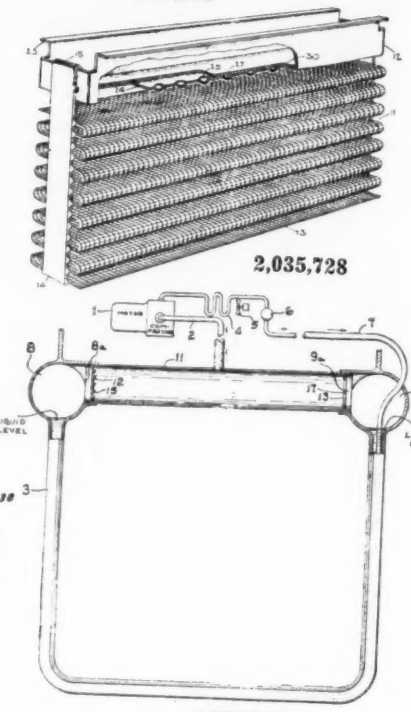

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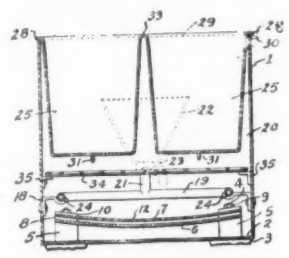

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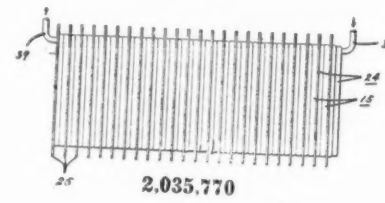

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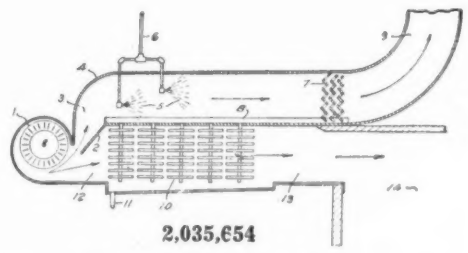

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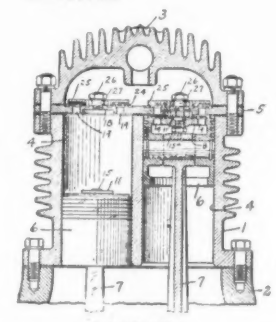

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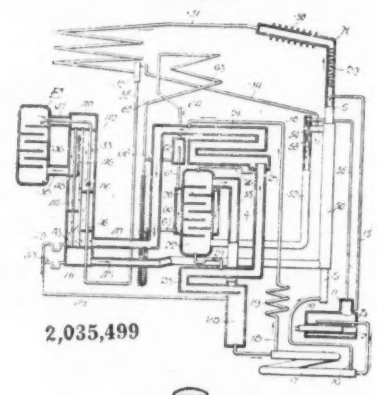

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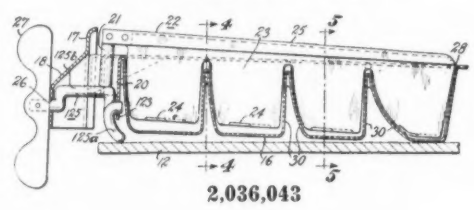

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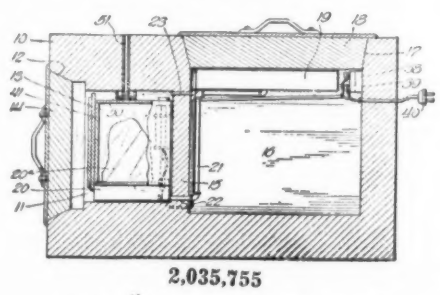

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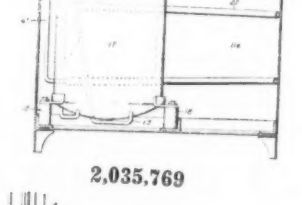

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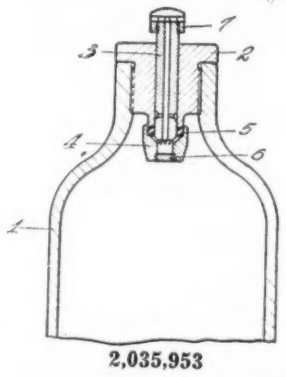

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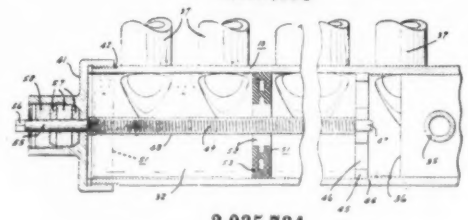

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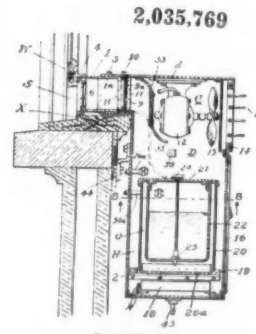

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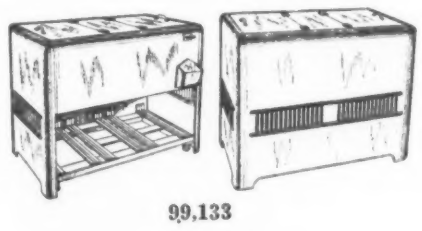

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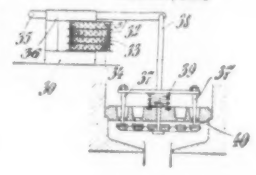

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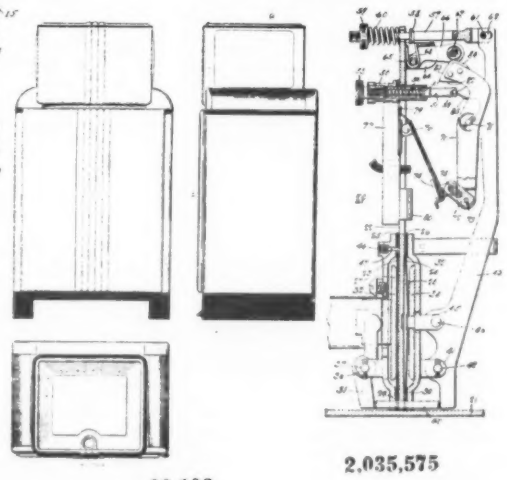

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Noell Represents Peerless In Midwest District

CHICAGO—Appointment of James A. Noell as district representative for the Peerless Ice Machine Co. in its midwestern sales territory, with headquarters in St. Louis, has been announced by company officials.

Mr. Noell, whose territory covers the states of Nebraska, Iowa, Kansas, Missouri, Oklahoma, and Arkansas, was previously connected with a refrigerator distributor in St. Louis.

M. K. Jasperson, formerly district representative for the company in the middle western states, with headquarters in Chicago, has been transferred to the eastern sales territory with Baltimore as his headquarters.

M-H Moves Detroit Office

DETROIT — Minneapolis-Honeywell Regulator Co. has moved its offices here to larger quarters in the Architects' Building, 415 Brainard St.

Holmes Joins Staff of Utilities Institute

CHICAGO—John M. Holmes, formerly of Baltimore, was recently added to the staff of Utilities Engineering Institute, reports E. P. Sorenson, president.

Mr. Holmes attended John Hopkins University where he specialized in thermodynamics, theoretical and practical mechanics, advanced study of heat and radiation, advanced electricity and magnetism, analytical geometry, and differential, integral calculus. He is also a graduate of Utilities Engineering Institute.

In his new position, Mr. Holmes will specialize in theoretical phases of refrigeration and air conditioning.

Chriss Goes to Higbee's

CLEVELAND—D. M. Chriss has been appointed manager of the electrical appliance department of Higbee's.

PATENTS

HAVE YOUR patent work done by a specialist. I have had more than 25 years' experience in refrigeration engineering. Prompt searches and reports. Reasonable fees. H. R. Van Deventer (ASRE), Patent Attorney, 342 Madison Avenue, New York City.

Wile Talks to Service Men

DETROIT—D. D. Wile, chief engineer of the refrigeration and air conditioning divisions of Detroit Lubricator Co. recently addressed two refrigeration service engineers meetings held in Toronto and Montreal. He spoke on the operation and application of thermostatic expansion valves.

More than 50 engineers were present at each meeting. R. E. Townsend of Detroit Lubricator's New York branch office visited the Canadian cities with Mr. Wile.

Letters from Service Men

Has Sheet Metal Experience, Now Studying Refrigeration

April 16, 1936.

Gentlemen:

Would like very much to secure employment in the refrigeration or air-conditioning field. My experience is limited to a home study course which I am studying. However, as my trade is sheet metal work I should like to find employment in that line with some concern where an opportunity would exist to break into the other at a later date.

I shall state my experience and education very briefly: Age—30 years, married, high school education, trade school (Sheet metal layout, oxy-acetylene welding, mathematics).

Sheet Metal Work—10 years—six years of which has been spent on fabricating metal parts for display counters and coolers.

At present I am taking a course with Utilities Engineering Institute on refrigeration.

I should like very much to have your advice on this matter and if you think an "ad" in your columns might be advisable I will try that also.—H. L. Kieffer, Box 226, Ogontz Road, Maumee, Ohio.

Answer: Your qualifications should be of interest to a commercial refrigeration distributor or dealer who is planning to go after air-conditioning business in earnest. Your experience in sheet metal work will be valuable in designing, fabricating, and installing duct systems, and the job will give you an opportunity to gain practical experience with the installation and servicing of refrigeration equipment.

At the present time, very few local dealers or contractors have all of the personnel they need to meet the requirements of air conditioning. Sheet metal contractors are adding refrigeration service men, and refrigeration contractors will undoubtedly have to add sheet metal workers, in order to handle a complete installation job.

The present tendency is for the manufacturers of air-conditioning equipment to look for local distributors or dealers who are primarily smart merchandising men. The big job now is to *sell* air conditioning. It seldom happens that good merchandisers are also good mechanics and most merchandisers will probably avoid the problems of operating a contracting business until the volume of business is sufficient to justify the addition of a special department to handle installation work. In the meantime they will probably sub-let the installation job after securing bids from the available contractors.

If the publication of your letter does not bring you an offer, we suggest that you try running a classified advertisement in three or more issues. We will be interested to know about the results.

Refrigerant Charge

Estate of J. O. Ellison
Automobiles, Radios, Refrigerators
29 Middlesex Street
Haverhill, Mass.

Editor:

Recently you published an article regarding the ascertaining of the refrigerant charge. Our copy was lost in the flood that has just visited us, and we should appreciate your sending another copy as soon as possible.

Enclosed you will find 10 cents in stamps to cover the cost of mailing.

SIDNEY J. ASHE.

Answer: The article dealing with methods of determining the proper refrigerant charge was published in the March 4 issue of ELECTRIC REFRIGERATION NEWS.

Technical Dictionary

5410 N. Ashland Ave.
Chicago, Ill.

Editor:

I would like to inquire as to whether you have any knowledge as to where I can obtain a technical dictionary pertaining to the technical words used in the refrigeration and air-conditioning industry. I am a student at the Greer College and I find some words quite technical.

I have looked everywhere for such a dictionary, but have been unable to find one. I would like to know the exact definition of some words so that I may understand my practice much better. CHESTER SLICKENMEYER.

Answer: We do not know of any technical dictionary which covers these subjects, but in the 1934-1936 Refrigerating Data Book, published by the American Society of Refrigerating Engineers, 37 West 39th St., New York City, there is "The Refrigerating Glossary" (starting on page 456), which gives definitions of a great many of the terms used in refrigeration and air-conditioning work.

The Greer College library may have this book; if not, some branch of the Chicago Public Library will no doubt have it.

Constant reading of publications dealing with electric refrigeration and air conditioning should also serve to help you find out the meaning of many of the terms used.

G. Clifford Sunman
Expert Refrigeration Service, Sales, Installations, Compressors Rebuilt
32 Pitman Ave., Wakefield, Mass.
March 11, 1936.

Gentlemen:

Please list me among Service Companies.

Keep up the good work of the REFRIGERATION NEWS. We could not get along without it.

G. CLIFFORD SUNMAN.

Received your paper and enjoy reading it very much! Being an independent service man and dealer, I wish to be placed on your Catalog Mailing List.—Serge Gladilin, 377 Crown St., New Haven, Conn.

BINDERS

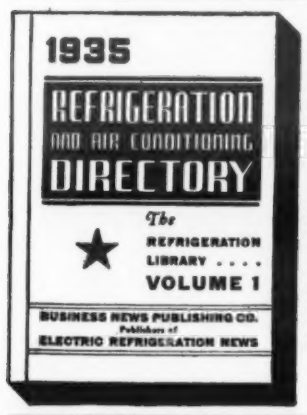
For back issues of the News

We offer a binder designed and made especially for keeping your file copies of Electric Refrigeration News neat and always available for ready reference.

It is made of stiff board covers, attractively bound in good quality of black imitation leather. The name Electric Refrigeration News is stamped in gold on the front cover and backbone.

The price is $3.75 shipped to you postpaid in the United States and Possessions and Pan-American Postal Union countries. For all Foreign countries postage based on a shipping weight of 6 pounds must be added to this price. Send your remittance with order. May we send you one?

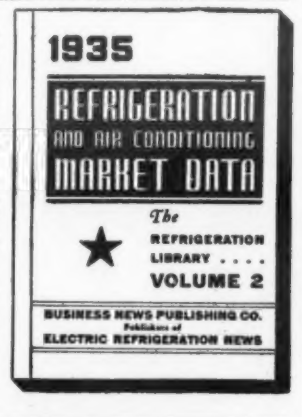
Electric Refrigeration News, 5229 Cass Ave., Detroit, Mich.



The **DIRECTORY** (380 pages, $3.00 per copy) is the industry reference book for all known sources of supply for refrigeration and air-conditioning products. Next edition will be published July 1, 1936.

Every sales executive should have the **MARKET DATA BOOK** (304 pages, $3.00 per copy) for its compilation of sales methods and sales figures recording industry development to date. Next edition to be published Sept. 1, 1936.

Combination Price for Both Books, $5.00



BOUND VOLUMES

Each of the following volumes contains all weekly issues of Electric Refrigeration News issued during a period of four months. Stiff paper board covers.

Vol. 8—Jan. 4 to April 26, 1933. (Serial Nos. 198 to 214.)
Vol. 9—May 3 to Aug. 30, 1933. (Serial Nos. 215 to 232.)
Vol. 10—Sept. 6 to Dec. 27, 1933. (Serial Nos. 233 to 249.)
Vol. 11—Jan. 3 to April 25, 1934. (Serial Nos. 250 to 266.)
Vol. 12—May 2 to Aug. 29, 1934. (Serial Nos. 267 to 284.)
Vol. 13—Sept. 5 to Dec. 26, 1934. (Serial Nos. 285 to 301.)
Vol. 14—Jan. 2 to April 24, 1935. (Serial Nos. 302 to 318.)
Vol. 15—May 1 to Aug. 28, 1935. (Serial Nos. 319 to 336.)
Vol. 16—Sept. 4 to Dec. 25, 1935. (Serial Nos. 337 to 353.)

Price $3.00 per volume, f.o.b. Detroit. Shipment will be made by express collect unless otherwise specified. Please send remittance with order.

Electric Refrigeration News, 5229 Cass Ave., Detroit, Mich.

How a Service Department Can Be Managed So as to Assist Salesmen

By W. D. Krauter, Service Manager, Gibson Electric Refrigerator Corp.

THE two words "Sales and Service" are in common use today. Seldom if ever, are the two words connected together either in writing or in practice. The most important part of electric refrigeration service has been overlooked due to the separation of these two functions and much benefit could be derived by interconnecting these two departments in any organization.

Service, in connection with merchandising of electric refrigerators or any other mechanical product, is accepted as an absolute necessity, regardless of the make or model of the machine being sold.

It is a definite fact that the distributors and dealers who offer the best service maintaining a capable personnel and properly equipped shop, are the most successful. Also the customers are better satisfied when dealing with an organization maintaining proper service.

It appears unnecessary to explain further the value or necessity of proper service. The point is that the most important phase of refrigeration service has been overlooked (possibly not overlooked but evaded) and that is the part that sales plays in service, and service plays in sales.

A number of individuals seem to believe that service is the necessary evil of the refrigeration industry. If a bit of thought is given to the matter, it becomes clear that this idea is not only wrong, but old fashioned and obsolete.

Spirit of Coordination Lacking

The service department, whether factory, distributor or dealer should be operated in such a way that it will not be a necessary evil, but a necessary aid to the sales department. As a rule the salesman and service man, work day after day, in the same locality, for the same organization, with the same product, and yet without any spirit of coordination. In that respect, the salesman believes that he should know nothing about service or the operation of the refrigerator and the service man believes that he should know nothing about sales or selling.

Looking at the picture from the service man's view point, he is really a salesman and an important one. It is much easier task to sell a new customer, who is open minded than to resell one that is prejudiced due to the trouble which has been experienced.

It can be seen, therefore, that the real selling job falls on the service man when is called out to a customer's home to correct some minor difficulty and at that time attempt to make good to the customer, the claims made by the salesman.

This is possible in some cases, but in others, the service man is forced to advise the customer that no refrigerator will do exactly what the salesman told her, when selling. Either of these sales is much more difficult than the original one.

As long as the salesman remains at such a distance from the service man, this difficulty will always be encountered. A salesman never attends a service meeting and a service man seldom if ever, attends a sales meeting. It appears necessary that the salesman and the service man should be drawn closer together which will benefit not only themselves, but their entire organization as well.

Not Provided in Training

In service schools and service manuals the technical and practical side of refrigeration is carefully explained and brought out. Hours and days are spent in studying the operation of the unit and the construction of the cabinet, in order that the student will be able to locate and make the necessary adjustments quickly and promptly on any service call.

We are not overlooking the fact that this is necessary, but after more consideration, it will be found that, it is only the minimum requirement for a good service man and that the most important part of his training has been overlooked.

Most any service man after some study and possibly a little experience can repair or correct a difficulty on a refrigerator, but the ideal service man is the one who can in addition to correcting the difficulty, correct the mental attitude of the customer, who has experienced trouble and feels dissatisfied, keeping her sold 100% on the machine which she has, and even picking up prospects for new sales.

If the service man were given more training on how to handle different personalities and also a little more sales training, it would be possible for him to do a much better job of satisfying the customer and along with that he could pick up a number of prospects to be turned over the salesman.

In order to encourage this plan, a bonus could be worked out for each prospect turned over to the salesman, otherwise, the service man will see no reason for the increased effort.

In addition, if the service man would give the matter proper thought, he would be able to supply the salesman with important items brought up to him when in discussion with the customers, in their homes. The items which the customer would bring up, would be of fundamental importance and just the things the salesman should use in building his selling program.

At the same time, if the salesman would take sufficient time to carefully study the operation and construction of the product he is selling, he would be able to talk about real truths of fundamental value which are really more important to the customer than the sales talk which is commonly used. Thus the salesman would not be compelled to resort to exaggerated statements in building up exorbitant claims, which sells few refrigerators, and causes trouble and dissatisfaction later.

Benefits Are Many

Sales and service have always maintained their distance, but now, by bringing them closer together and getting the service man to study at least sales psychology and the salesman to study the construction of the product, and thus get closer cooperation, one department would help the other. It would not only reduce service expense but at the same time, would result in increased sales and more satisfied customers.

The results to be had from this connection are unlimited in comparison to its cost and effort. It is only necessary for the salesman to carefully study the service manual, in addition to contacting the service department or factory to become familiar with his product.

It is impossible to give definite instructions to a service man for contacting every customer, since there are many different types of personalities to cope with, and a service call in one locality is entirely different from that in another. However, the following plan will be helpful to the man who will study it and work out his own plan to apply to each case.

In making a service call—

Rules for the Service Man

1. The proper introduction is important.
2. Get as much information as possible from the customer, regarding the difficulty but at the same time be diplomatic and do not insist on discussion for the trouble can usually be located quickly by the experienced service man by following a systematic process of elimination.
3. Never argue with a customer.
4. Explain any questions in a diplomatic manner.
5. Never make promises unless they fulfilled.
6. When servicing a refrigerator, always check to make certain that everything is right. Do not check just one part and then leave the job to find that an adjustment which could have been made on the original call must be made the following week. Always work to eliminate as many service calls as possible. This will show capable workmanship on the part of the service man and will result in a more satisfied customer and will aid in furthering sales in addition to reducing service expense.
7. Never terminate a service call until you are certain the customer is perfectly satisfied and the machine is operating properly.
8. Allow sufficient time to complete same and follow a definite procedure. Each service man should work out the most satisfactory system in connection with making a service call depending on the locality and type of customer. It will usually be found best if the service man is of a cheerful nature and uses a smile as his most important tool (although in some cases the customer would be satisfied more easily if the service man were sad and depressed). It is necessary that each individual apply himself to the task of properly satisfying the customer.
9. Before leaving a customer's home make certain the person operating the refrigerator has been properly instructed in regard to the use of the temperature regulator, how to defrost, how to clean the condenser, how to oil the unit (if it requires this attention), and how to replace the shipping bolts when the refrigerator is moved unless the dealer service includes this item.
10. Always study the customer with the idea in mind that satisfaction and sales are equally as important as adjusting or replacing parts.

In summation, sales and service should be brought closer together, stimulating cooperation, and then the two words, sales and service become "Servicales."

Classified

RATES: Fifty words or less, one insertion $2.00, additional words four cents each. Three insertions $5.00, additional words ten cents each.

PAYMENT in advance is required for advertising in this column.

REPLIES to advertisements with Box No. should be addressed to Electric Refrigeration News, 5229 Cass Ave., Detroit, Mich.

POSITIONS AVAILABLE

SALES ENGINEER WANTED. Prominent manufacturer of automatic control equipment has several openings for sales engineers. Previous University training or experience in air conditioning and heating, and an acquaintanceship with architects and engineers is essential. Box 774, Electric Refrigeration News.

WANTED: By large manufacturer in Middle West, a technically trained man thoroughly familiar with the design, application and installation of heating, ventilating, cooling, dehumidifying and control equipment. Prefer one having had experience in writing air conditioning manual. Interviews will be arranged on basis of first letter. Our employees know of this advertisement. Box 790, Electric Refrigeration News.

POSITIONS WANTED

RELIABLE MARRIED MAN well advanced in study course with R.A.C.I., Chicago, 62 lessons completed, desires position as service man's helper. Good character, willing to work for promotion. Detroit resident, wishes location in the city. Box 791, Electric Refrigeration News.

DISTRIBUTORS WANTED

MICHIGAN — OHIO — INDIANA for new automatic defroster for household and commercial refrigerators. A real money-maker. The only 100% automatic defroster on the market. No competition. Fully guaranteed. 20 to 35% savings in electric consumption. Over 100% profit. Unusual opportunity. Address all replies to R. P. Gilcher, 1013 Lafayette Bldg., Detroit, Mich.

EQUIPMENT FOR SALE

BRAND NEW PARTS. Manufacturers' closeouts—fully guaranteed one year. Detroit Lubricator thermostatic expansion valves, model 673 flange type, $3.95, equipped with S.A.E. fitting $4.45. Detroit Lubricator solenoid valves, model 682, $3.95. "Automatic" model No. 71 solenoid water valves $3.75. Model No. 73 R $3.75. Mullins 3 tray evaporators all porcelain, complete with porcelain front and porcelain suspension plate trays, etc., $6.95. Hundreds of other exceptional buys, as well as a complete line of standard nationally advertised parts, at drastic price reductions. Write for our catalog. Federal Refrigerator Corporation, 57 East 25th Street, New York City.

NEW, single and twin cylinder methyl compressors, especially adaptable, domestic and small commercial installations; condensers, receiver valves, pulleys, fans; motors, ⅙ to ⅓ H.P.; fittings, expansion valves, Bristol recording instruments, etc. All new merchandise in original containers. Will make prices attractive for quick disposal. Box 775, Electric Refrigeration News.

REFRIGERATOR DEALERS! Make money with Federal's reconditioned refrigerators. 1000 refrigerators such as Frigidaire, G. E., Kelvinator, Electrolux, etc., completely remanufactured and rebuilt, some as is, as low as $15; also hundreds of new refrigerators priced for promotional purposes. Federal Refrigerator Corp., 57 East 25th St., New York.

REPAIR SERVICE

HALECTRIC control repair service. All makes thermostatic and pressure controls rebuilt. Automatic and thermostatic expansion valves repaired. Refrigerant gases carried in stock for rush shipment. Warrenoli for stuck-up compressors. Rebuilt American Radiator Mercoid controls similar to No. 848, five dollars each. Halectric Laboratory, 1793 Lakeview Rd., Cleveland, Ohio.

GENERAL ELECTRIC sealed units repaired, rebuilt. Guaranteed workmanship. The largest shop and best equipped in the United States. Give model number when writing. Immediate service. Satisfied customers in every part of the country. Refrigerator Engineering Parts and Service Co., 2800 So. Parkway, Chicago, Ill.

MAJESTIC UNITS, any model, standard or hermetic, rebuilt or exchanged $17.50. Any household model G.E. rebuilt $22.50. All model Majestics in stock for prompt exchange. All prices F.O.B. Chicago and guarantee six months. Wholesale only. Refrigeration Products, Inc., 122 W. Illinois St., Chicago, Ill.

DISPLAYS

ARTIFICIAL FOOD DISPLAYS at prices you can afford to pay. A realistic food set of meats, fruits and vegetables for every make refrigerator. Complete sets from $3.00 to $6.00. Write your source of refrigerator supply or direct to Cincinnati Doll Co., 311-313 E. Twelfth St., Cincinnati, Ohio.

SCHOOLS

PRACTICAL REFRIGERATION TRAINING at Universal. Learn by doing. Training on commercial, domestic equipment. Hundreds of units and refrigerators to work on, including repairs to valves, controls, motors, compressors that qualified men for jobs in refrigeration and air conditioning industry. Free folder. Universal Refrigeration Engineering School, 352 Fourth Avenue, New York.